

Pioneer

Service Manual

ORDER NO.
CRT2645

BRIDGEABLE POWER AMPLIFIER

PRS-X720

X1H/UC

PRS-X320

X1H/UC

PRS-X220

X1H/UC

- This service manual should be used together with the following manual(s):

Model	Order No.	Mech. Module	Remarks
PRS-X720/X1R/UC	CRT2361		

EXPLODED VIEWS AND PARTS LIST

PACKING(Page 2)

● PACKING SECTION PARTS LIST

Mark No. Symbol and Description	Part No.			
	PRS-X720/X1R/UC	PRS-X720/X1H/UC	PRS-X320/X1H/UC	PRS-X220/X1H/UC
1 Screw Assy	HEA0047	HEA0057	HEA0057	HEA0057
Screw Assy	HXA0323	HXA0364	HXA0364	HXA0364

EXTERIOR(Page 4)

● EXTERIOR SECTION PARTS LIST

Mark No. Symbol and Description	Part No.	
	PRS-X720/X1R/UC	PRS-X720/X1H/UC
14 Amp Unit	HWH0091	HWH0159

EXTERIOR(Page 6)

● EXTERIOR SECTION PARTS LIST

Mark No. Symbol and Description	Part No.	
	PRS-X320/X1R/UC	PRS-X320/X1H/UC
14 Amp Unit	HWH0095	HWH0160

EXTERIOR(Page 8)

● EXTERIOR SECTION PARTS LIST

Mark No. Symbol and Description	Part No.	
	PRS-X220/X1R/UC	PRS-X220/X1H/UC
14 Amp Unit	HWH0099	HWH0161

PIONEER CORPORATION

4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan

PIONEER ELECTRONICS SERVICE INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.

PIONEER EUROPE NV Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium

PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 253 Alexandra Road, #04-01, Singapore 159936

Pioneer

PRS-X720/X1R/UC



ORDER NO.
CRT2361

BRIDGEABLE POWER AMPLIFIER

PRS-X720

X1R/UC

PRS-X320

X1R/UC

PRS-X220

X1R/UC

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1. SAFETY INFORMATION

CAUTION

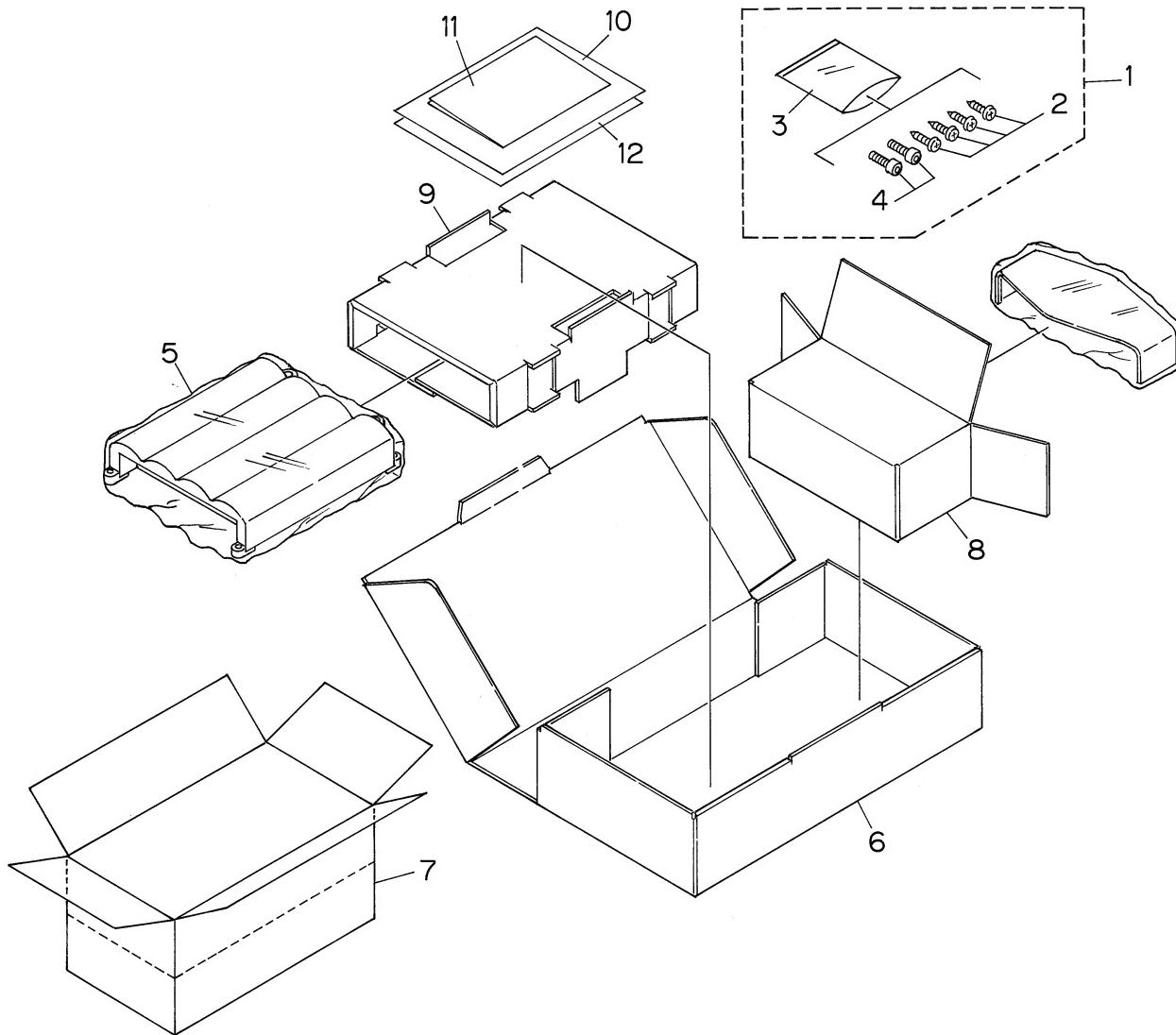
This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely; you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING



NOTE:

- Parts marked by “*” are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to  mark on the product are used for disassembly.

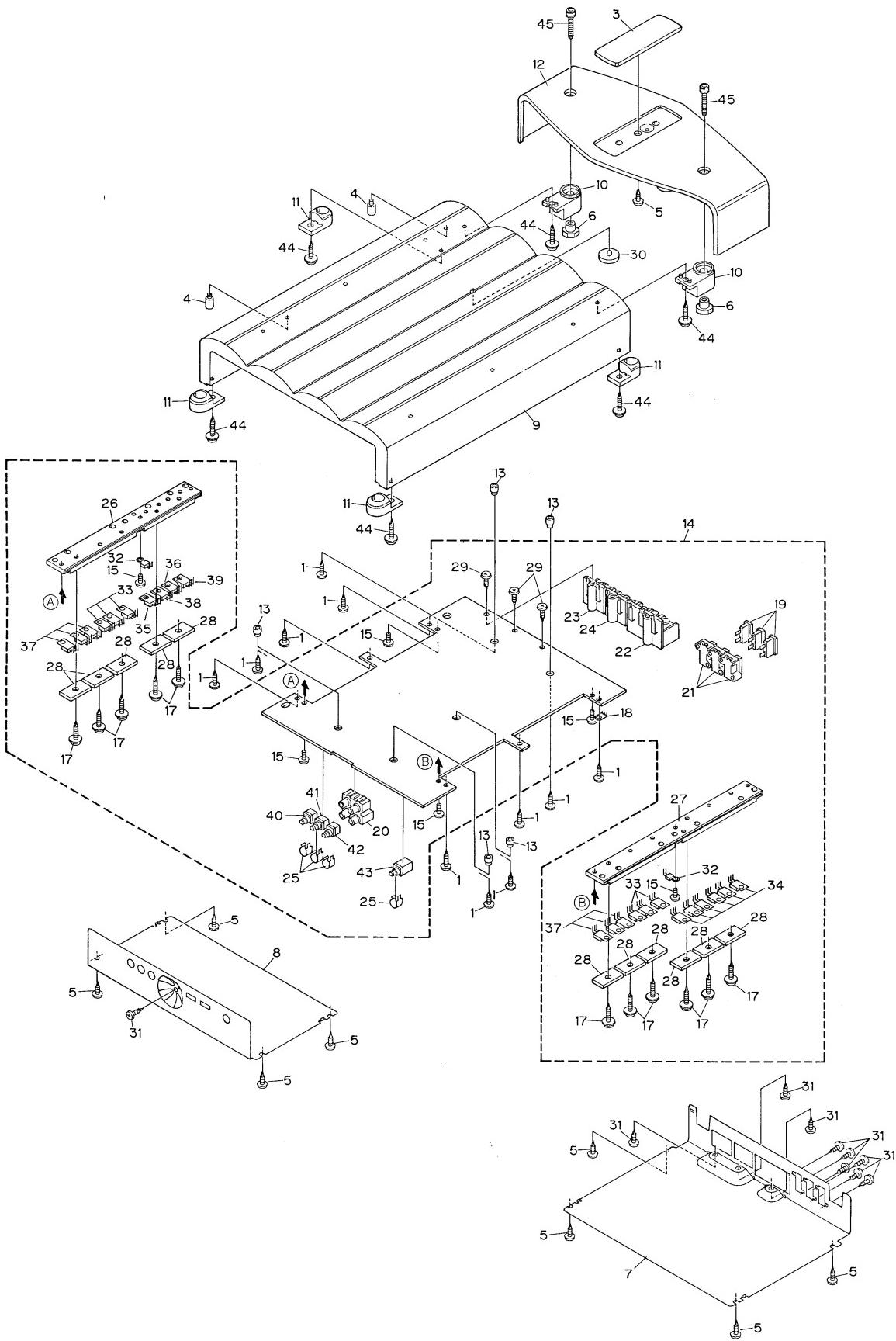
● PACKING SECTION PARTS LIST

Mark No.	Description	Part No.		
		PRS-X720/X1R/UC	PRS-X320/X1R/UC	PRS-X220/X1R/UC
1	Screw Assy	HEA0047	HEA0047	HEA0047
2	Screw	BYC40P180FZK	BYC40P180FZK	BYC40P180FZK
3	Polyethylene Bag	HEG0011	HEG0011	HEG0011
4	Screw	SMZ50H300FCR	SMZ50H300FCR	SMZ50H300FCR
5	Polyethylene Bag	HEG0022	HEG0022	HEG0022
6	Carton	HHG0170	HHG0171	HHG0172
7	Contain Box	HHL0170	HHL0171	HHL0172
8	Protector	HHP0043	HHP0043	HHP0043
9	Protector	HHP0063	HHP0064	HHP0065
*	10 Spec Sheet	HRB0044	HRB0043	HRB0040
	11 Owner's Manual	HRD0087	HRD0087	HRD0087
*	12 Warranty Card	HRY1070	HRY1070	HRY1070

● Owner's Manual

Model	Part No.	Language
PRS-X720/X1R/UC	HRD0087	English, French
PRS-X320/X1R/UC		
PRS-X220/X1R/UC		

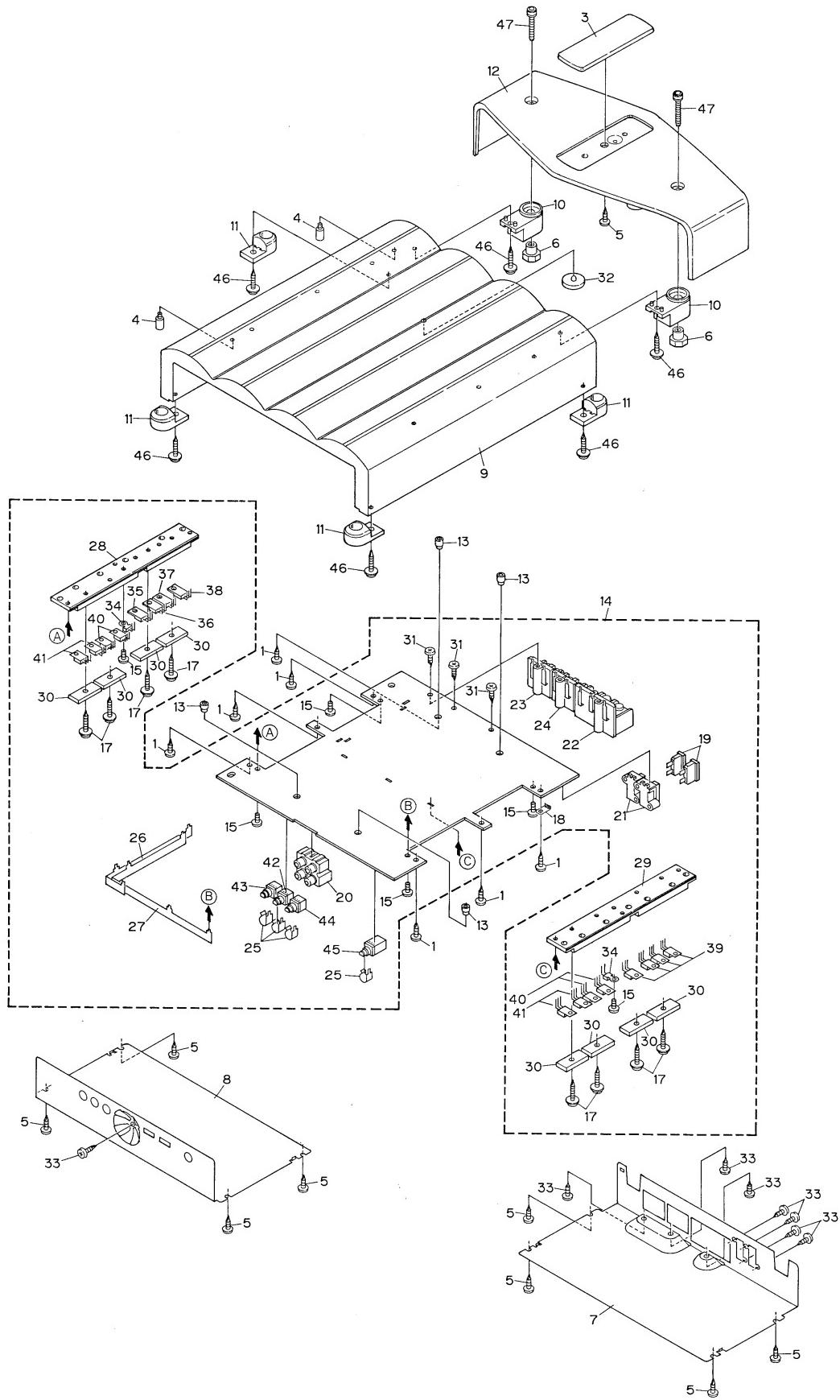
2.2 EXTERIOR(PRS-X720/X1R/UC)



● EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw(M3×12)	CBA1323	26	Heat Sink	HNR0113
2	.....		27	Heat Sink	HNR0114
*	3 Badge	HAM0013	28	Bar	HNR0124
	4 Screw(M3×5)	HBA0006	29	Screw	PPZ30P100SAD
	5 Screw(M3×8)	HBA0011	30	Light Pipe Unit	HXA0201
6	Insert	HBN0003	31	Screw	PPZ30P100FZK
7	Case	HNB0087	32	Thermistor(TH901, 902)	CCX1013
8	Case	HNB0089	33	FET(Q561-566)	94-4980
9	Heat Sink	HNR0110	34	FET(Q905, 906, 911-914)	STP50NE08
10	Bracket	HNS0070	35	Transistor(Q907)	2SD2395
11	Bracket	HNS0071	36	Diode(D907)	FML22S
12	End Cap	HNS0072	37	FET(Q567-572)	94-4981
13	Spacer	HNV0016	38	Transistor(Q908)	2SB1566
14	Amp Unit	HWH0091	39	Diode(D910)	FML22R
15	Screw	BBZ30P060FMC	40	Variable Resistor(VR453)	CCS1265
16	.....		41	Volume(VR451)	HCS0001
17	Screw(M3×14)	CBA1382	42	Variable Resistor(VR452)	CCS1263
18	Terminal(CN905)	CKF1059	43	Variable Resistor(VR101)	CCS1266
19	Fuse(30A)	HEK0030	44	Screw(M3×14)	HBA0017
20	Pin Jack(CN851)	HKB0006	45	Screw	SMZ50H300FCR
21	Fuse Holder	HKE0012			
22	Terminal(CN901)	HKE0020			
23	Terminal(CN551)	HKE0021			
24	Terminal(CN552)	HKE0021			
25	Clip	HNC0054			

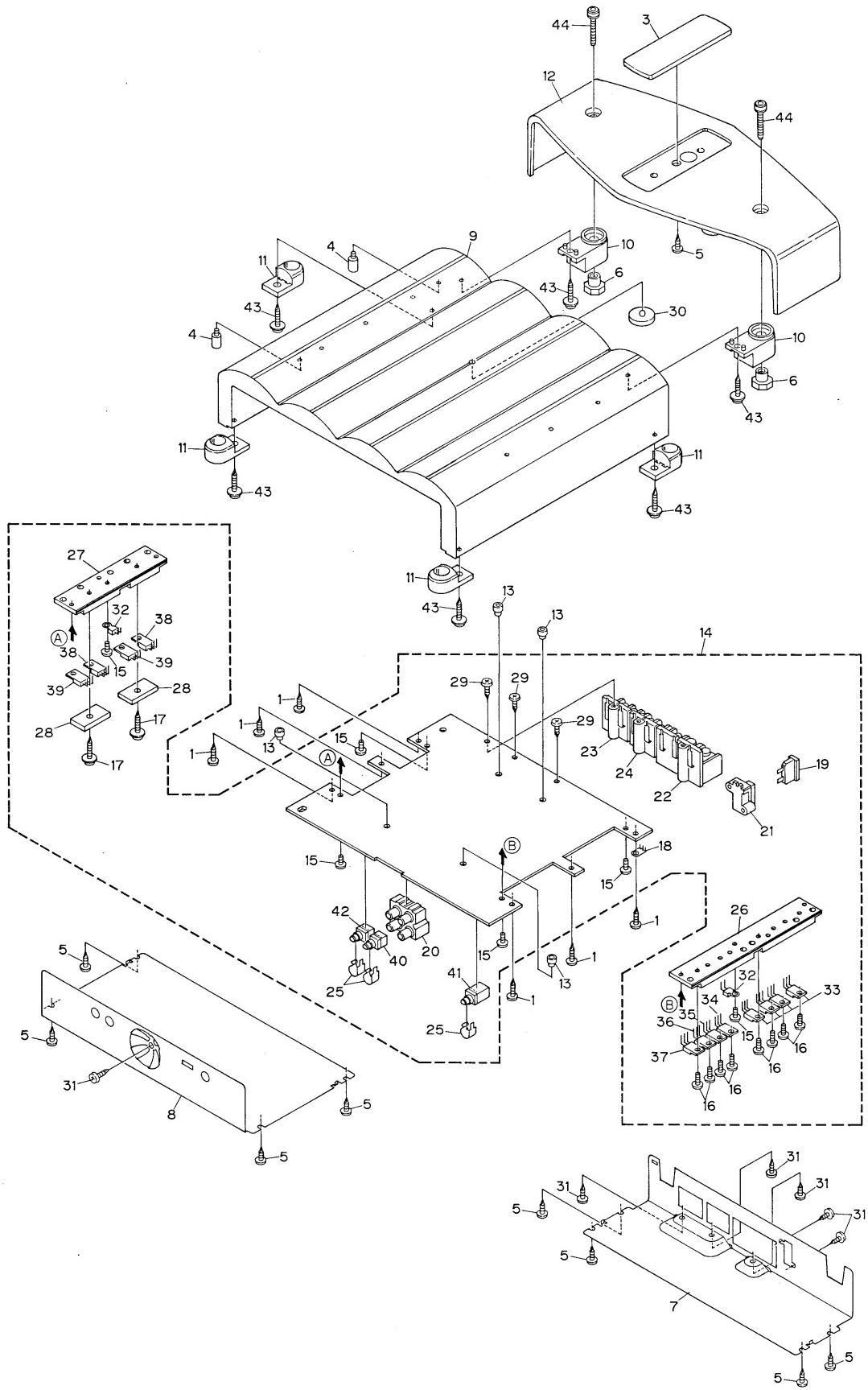
2.3 EXTERIOR(PRS-X320/X1R/UC)



● EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Screw(M3×12)	CBA1323		26	Buss Bar	HNC0064
	2	.....			27	Buss Bar	HNC0065
*	3	Badge	HAM0013		28	Heat Sink	HNR0115
	4	Screw(M3×5)	HBA0006		29	Heat Sink	HNR0116
	5	Screw(M3×8)	HBA0011		30	Bar	HNR0124
	6	Insert	HBN0003		31	Screw	PPZ30P100SAD
	7	Case	HNB0086		32	Light Pipe Unit	HXA0201
	8	Case	HNB0089		33	Screw	PPZ30P100FZK
	9	Heat Sink	HNR0111		34	Thermistor(TH901, 902)	CCX1013
	10	Bracket	HNS0070		35	Transistor(Q908)	2SB1566
	11	Bracket	HNS0071		36	Transistor(Q907)	2SD2395
	12	End Cap	HNS0072		37	Diode(D907)	FML22S
	13	Spacer	HNV0016		38	Diode(D910)	FML22R
	14	Amp Unit	HWH0095		39	FET(Q905, 906, 911, 912)	STP50NE08
	15	Screw	BBZ30P060FMC		40	FET(Q563, 564, 565, 566)	94-4980
	16	.....			41	FET(Q567, 568, 569, 570)	94-4981
	17	Screw(M3×14)	CBA1382		42	Volume(VR451)	HCS0001
	18	Terminal(CN902)	CKF1059		43	Variable Resistor(VR453)	CCS1265
	19	Fuse(30A)	HEK0030		44	Variable Resistor(VR452)	CCS1263
	20	Pin Jack(CN851)	HKB0006		45	Variable Resistor(VR101)	CCS1266
	21	Fuse Holder	HKE0012		46	Screw(M3×14)	HBA0017
	22	Terminal(CN901)	HKE0020		47	Screw	SMZ50H300FCR
	23	Terminal(CN651)	HKE0021				
	24	Terminal(CN652)	HKE0021				
	25	Clip	HNC0054				

2.4 EXTERIOR(PRS-X220/X1R/UC)



● EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Screw(M3×12)	CBA1323		26	Heat Sink	HNR0117
	2	.....			27	Heat Sink	HNR0118
*	3	Badge	HAM0013		28	Bar	HNR0124
	4	Screw(M3×5)	HBA0006		29	Screw	PPZ30P100SAD
	5	Screw(M3×8)	HBA0011		30	Light Pipe Unit	HXA0201
	6	Insert	HBN0003		31	Screw	PPZ30P100FZK
	7	Case	HNB0088		32	Thermistor(TH901, 902)	CCX1013
	8	Case	HNB0090		33	FET(Q905, 906, 911, 912)	IRFIZ44N
	9	Heat Sink	HNR0112		34	Diode(D907)	FML22S
	10	Bracket	HNS0070		35	Diode(D910)	FML22R
	11	Bracket	HNS0071		36	Transistor(Q907)	2SD2395
	12	End Cap	HNS0072		37	Transistor(Q908)	2SB1566
	13	Spacer	HNV0016		38	FET(Q565, 566)	94-4980
	14	Amp Unit	HWH0099		39	FET(Q567, 568)	94-4981
	15	Screw	BBZ30P060FMC		40	Volume(VR451)	HCS0001
	16	Screw	BMS30P080FMC		41	Variable Resistor(VR101)	CCS1266
	17	Screw(M3×14)	CBA1382		42	Variable Resistor(VR453)	CCS1265
	18	Terminal(CN902)	CKF1059		43	Screw(M3×14)	HBA0017
	19	Fuse(30A)	HEK0030		44	Screw	SMZ50H300FCR
	20	Pin Jack(CN851)	HKB0006				
	21	Fuse Holder	HKE0012				
	22	Terminal(CN901)	HKE0020				
	23	Terminal(CN651)	HKE0021				
	24	Terminal(CN652)	HKE0021				
	25	Clip	HNC0054				

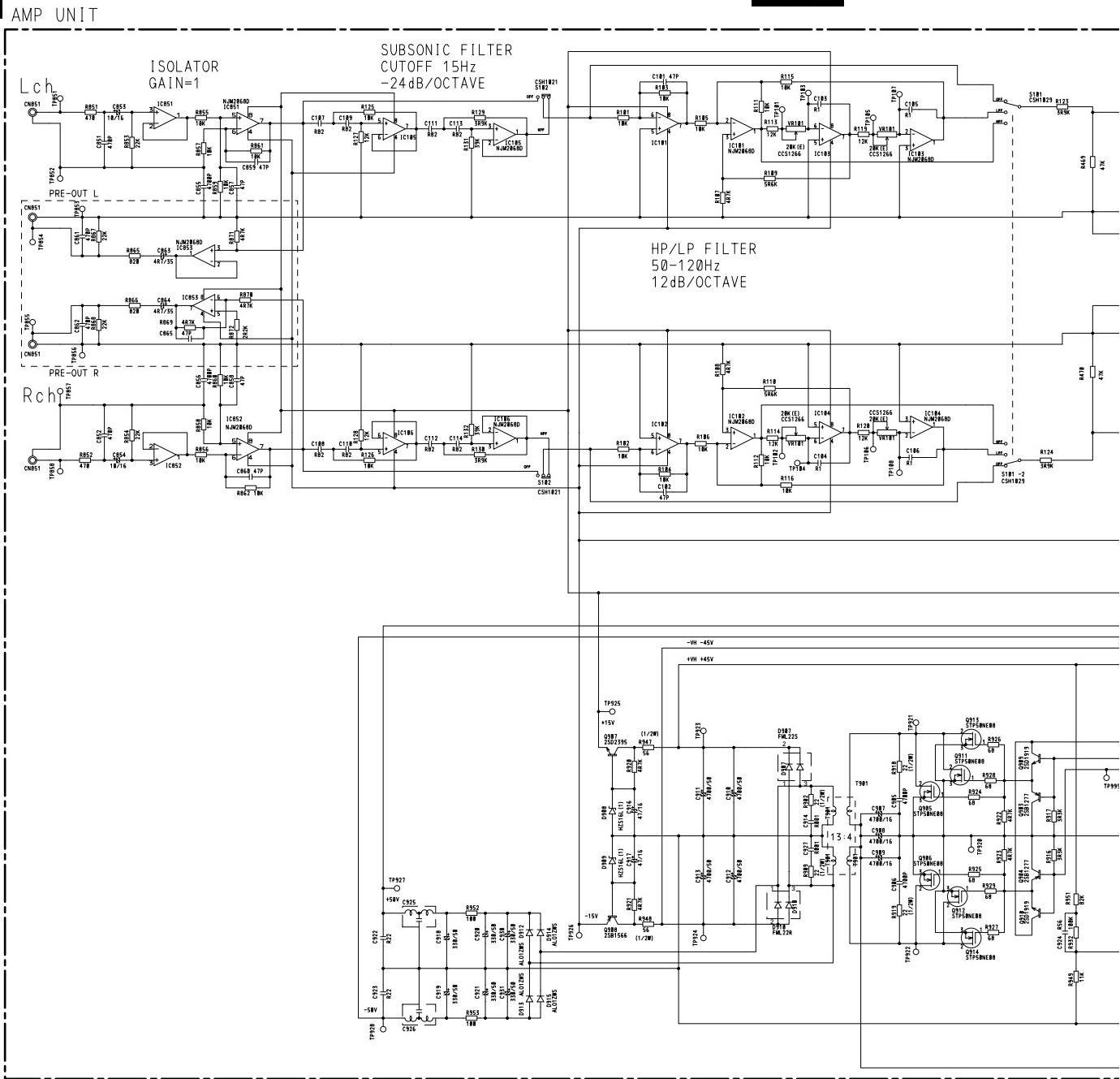
3. SCHEMATIC DIAGRAM

3.1 AMP UNIT(GUIDE PAGE)(PRS-X720/X1R/UC)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

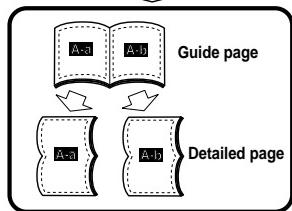
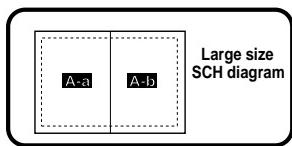
A

A-a

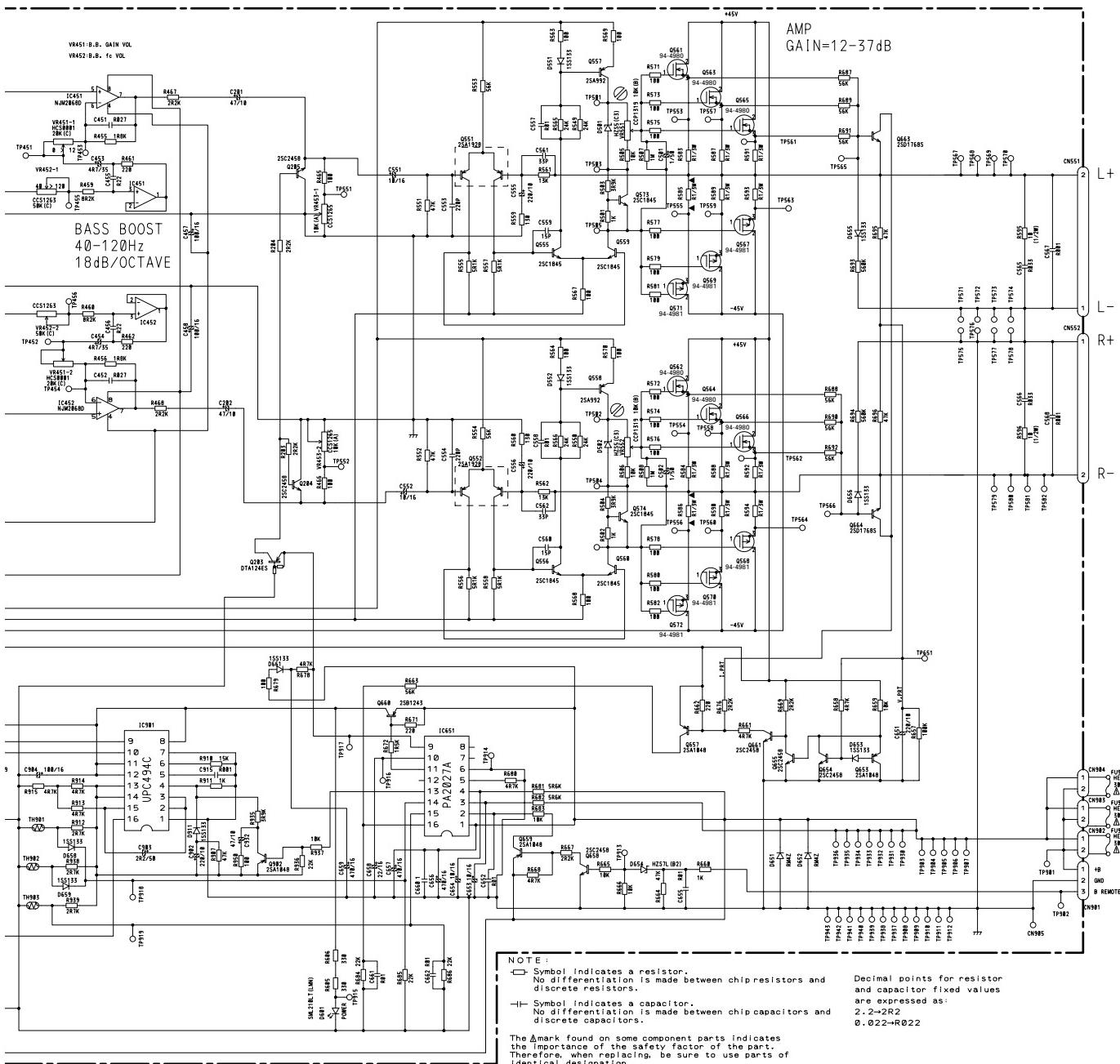


10

A



A-b



NOTE:

- I Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
- II Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor
and capacitor fixed values
are expressed as:
 $2.2 \rightarrow R22$
 $0.022 \rightarrow R022$

The **Δ**mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

A

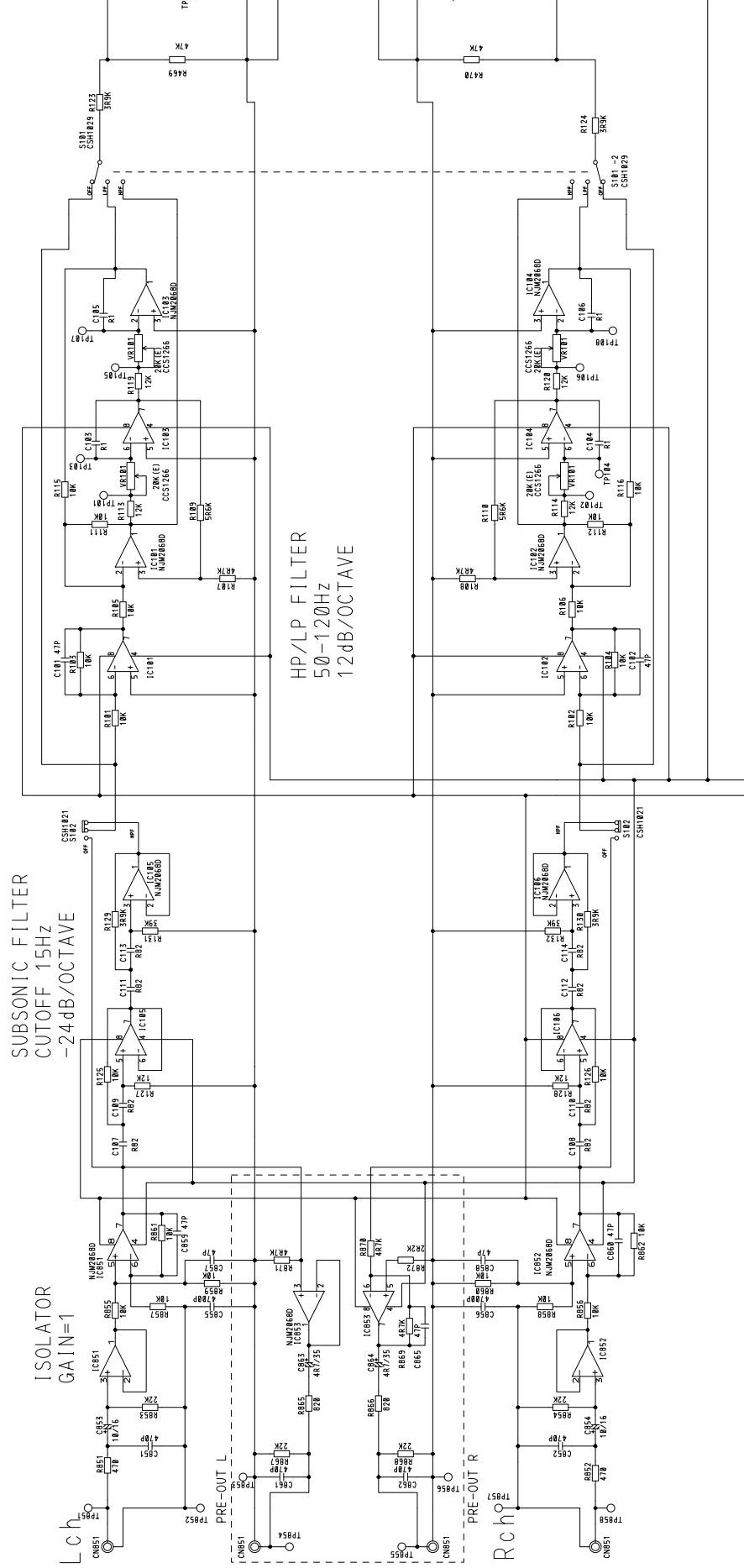
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AMP UNIT

A-a

1Ω

A-a A-b



1Ω

2

3

4

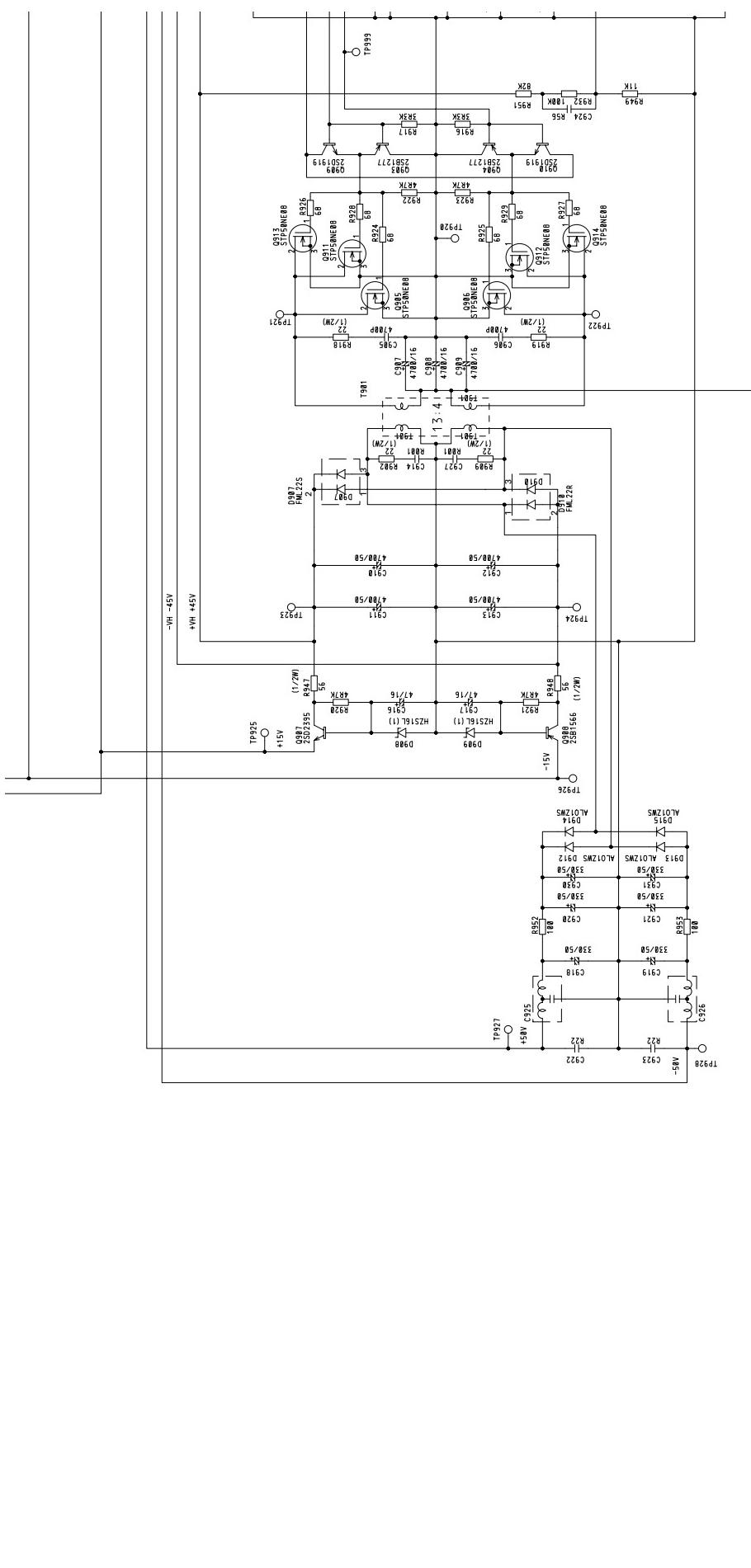
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A

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C

D



A-b

A

B

C

D

A-a

13

A-a A-b

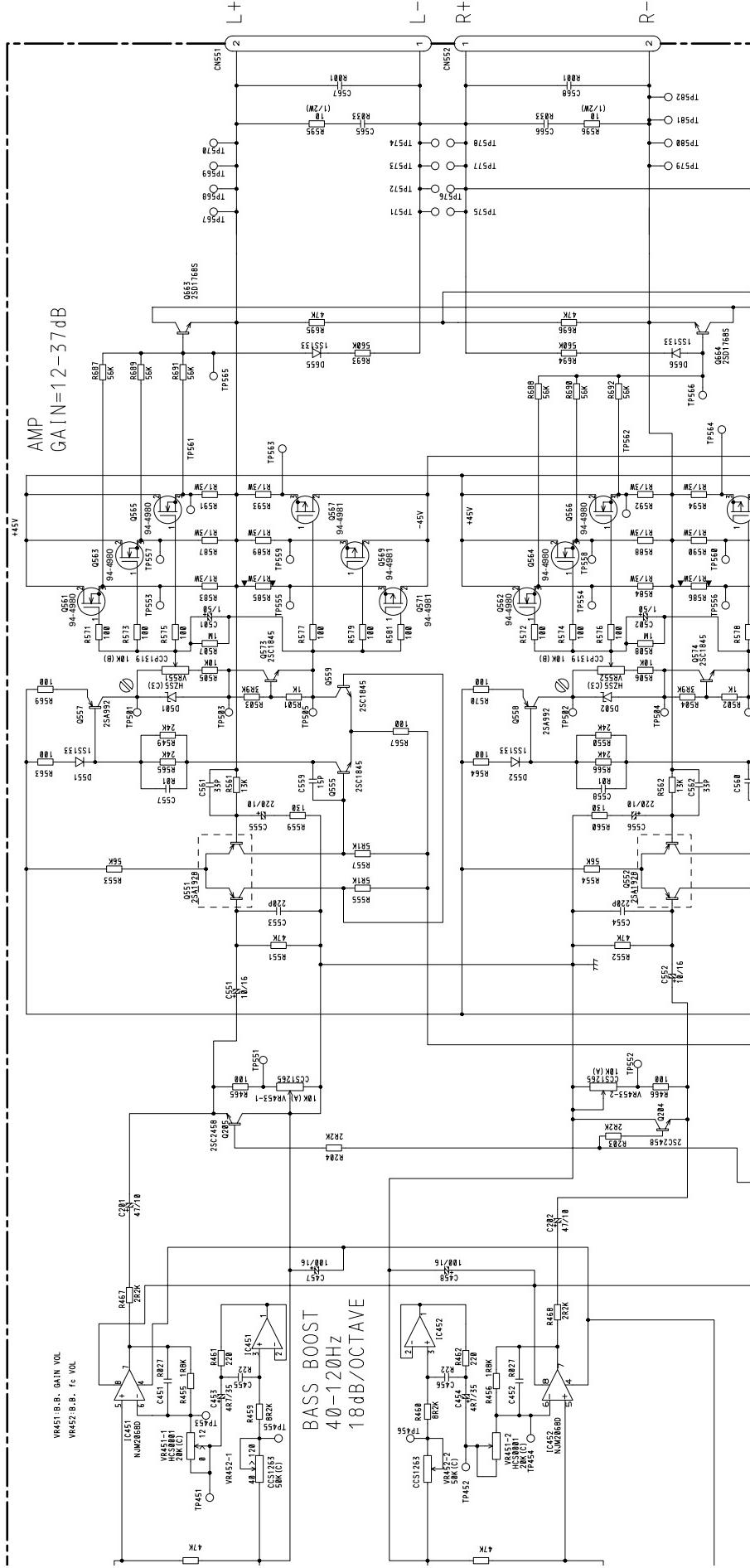
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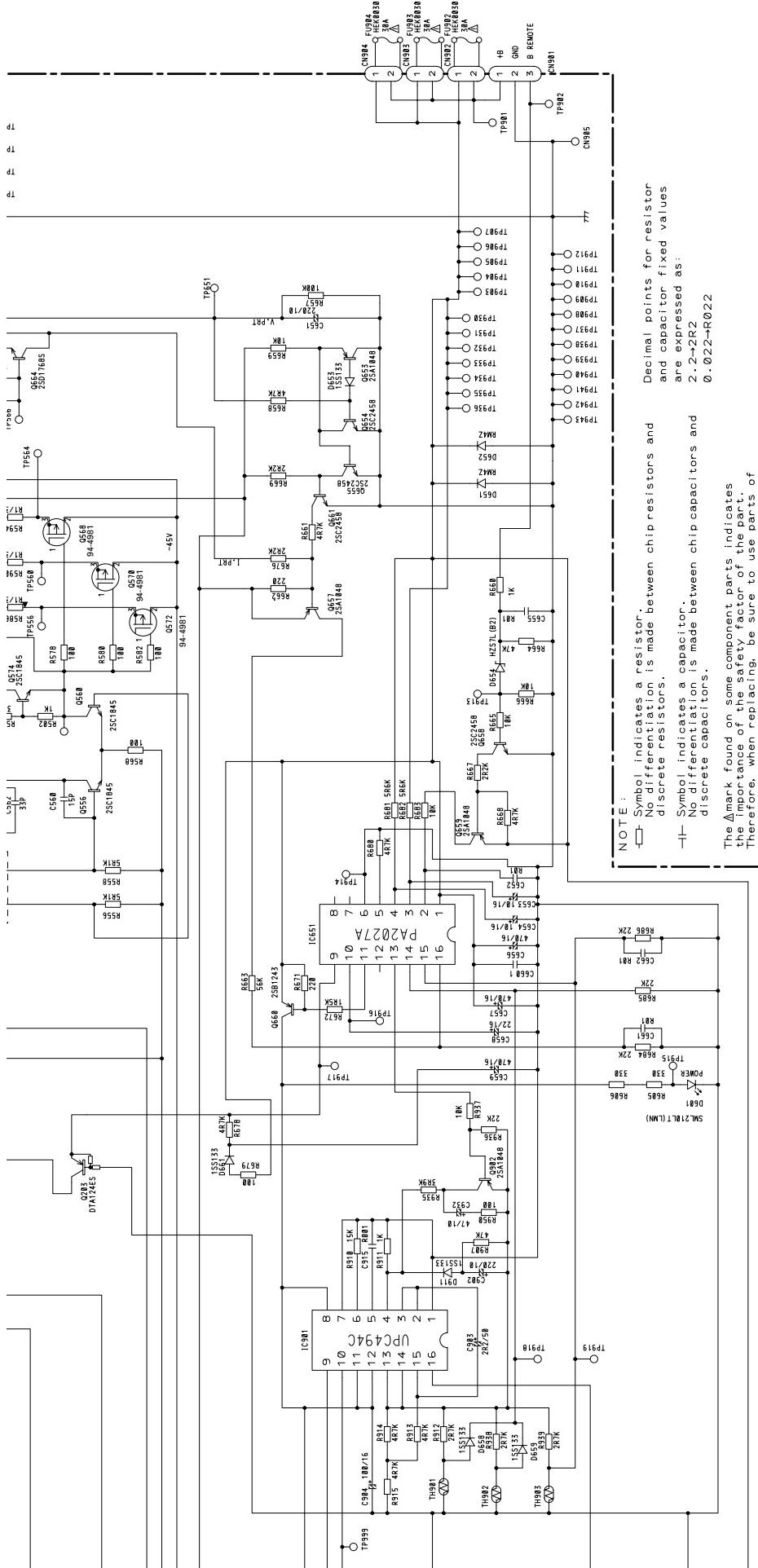
B

C

D

A-b





A-a A-b

A

B

C

D

A-b

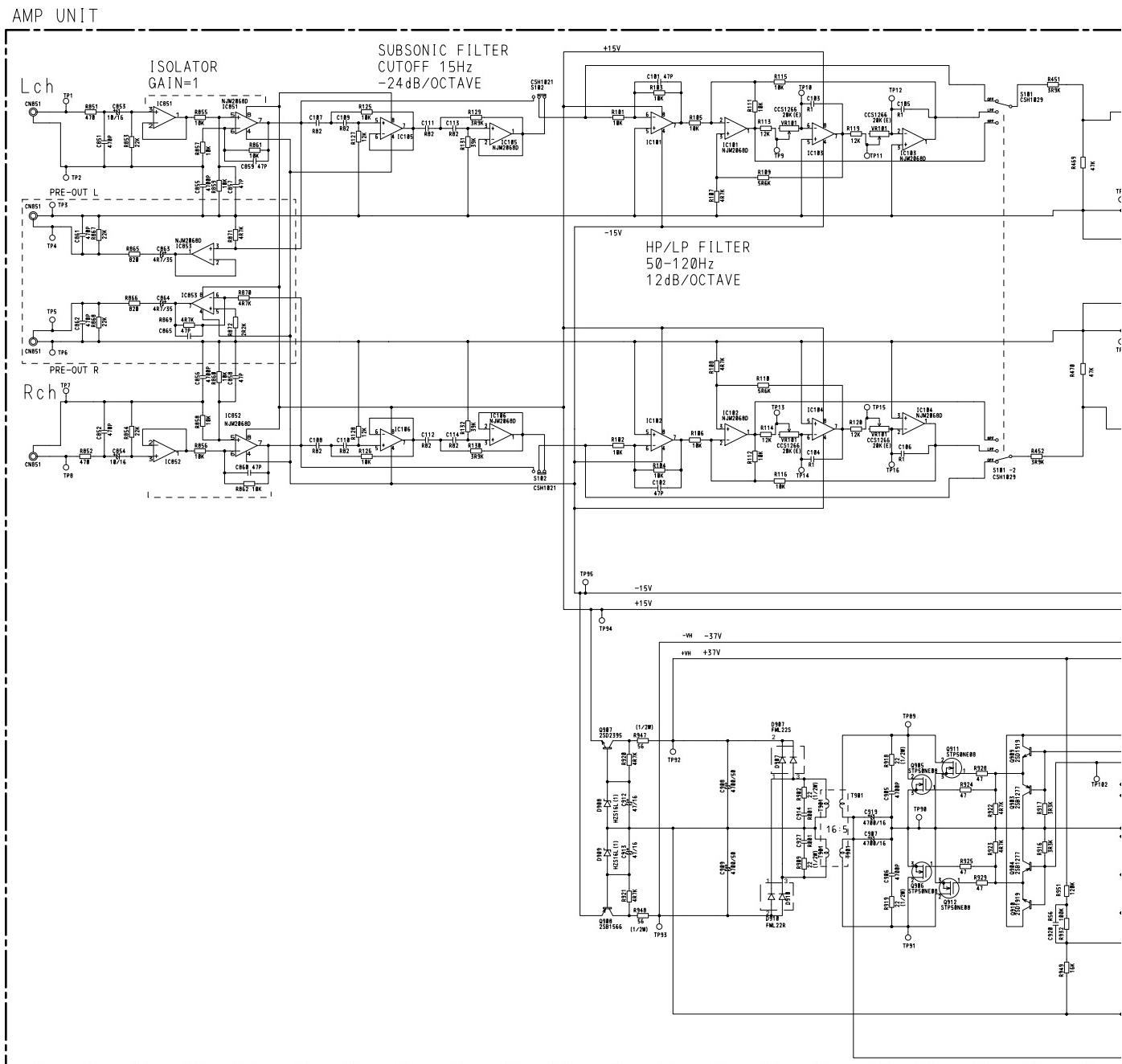
15

3.2 AMP UNIT(GUIDE PAGE)(PRS-X320/X1R/UC)

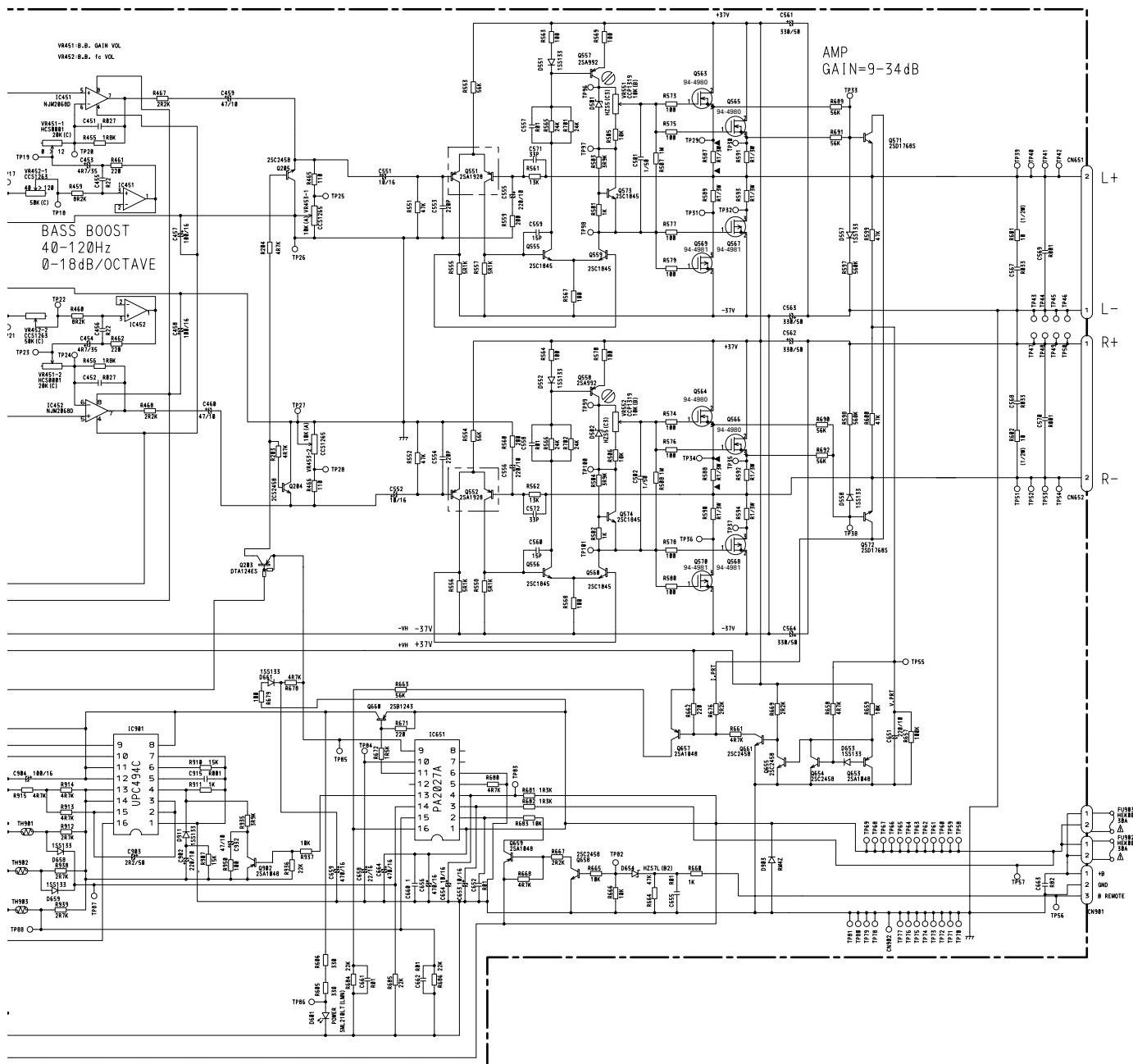
A

A

A-a



A-b



A

A-a A-b

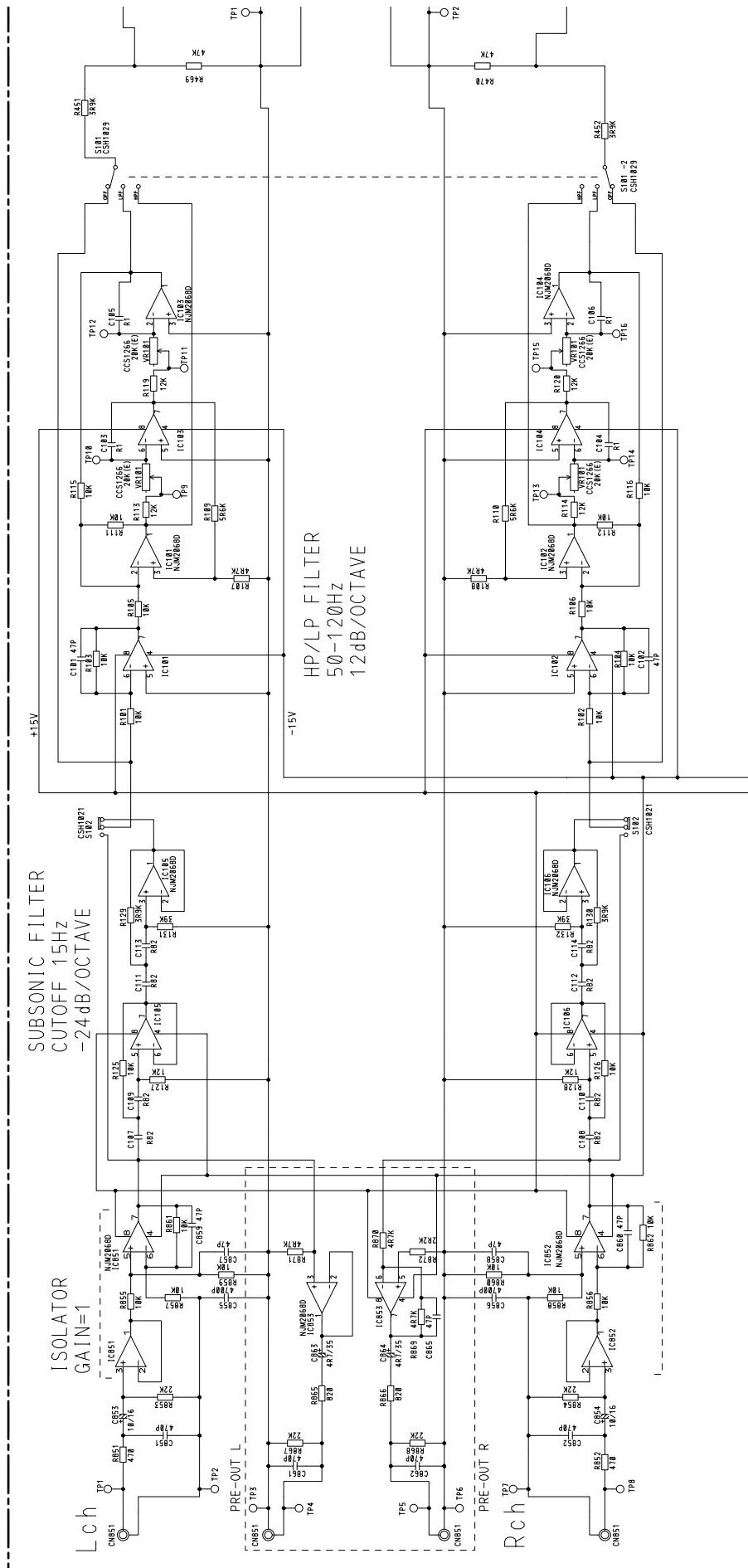
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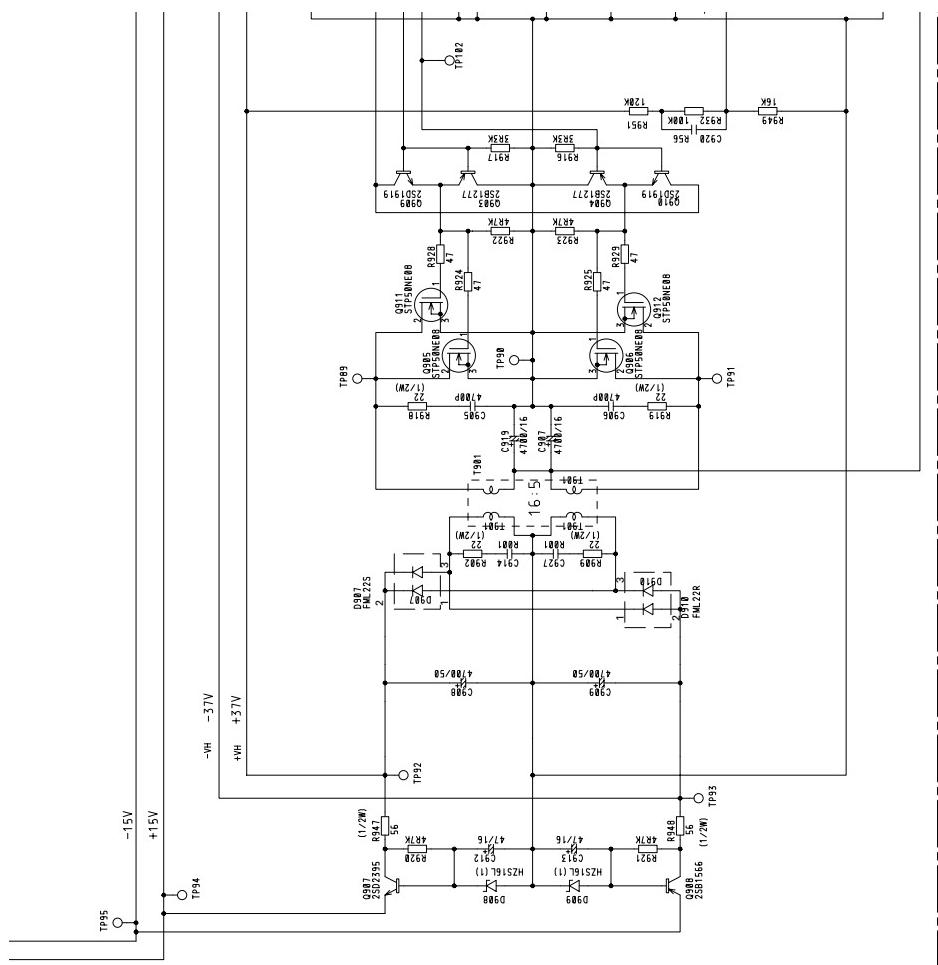
B

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AMP UNIT





A-a A-b

A

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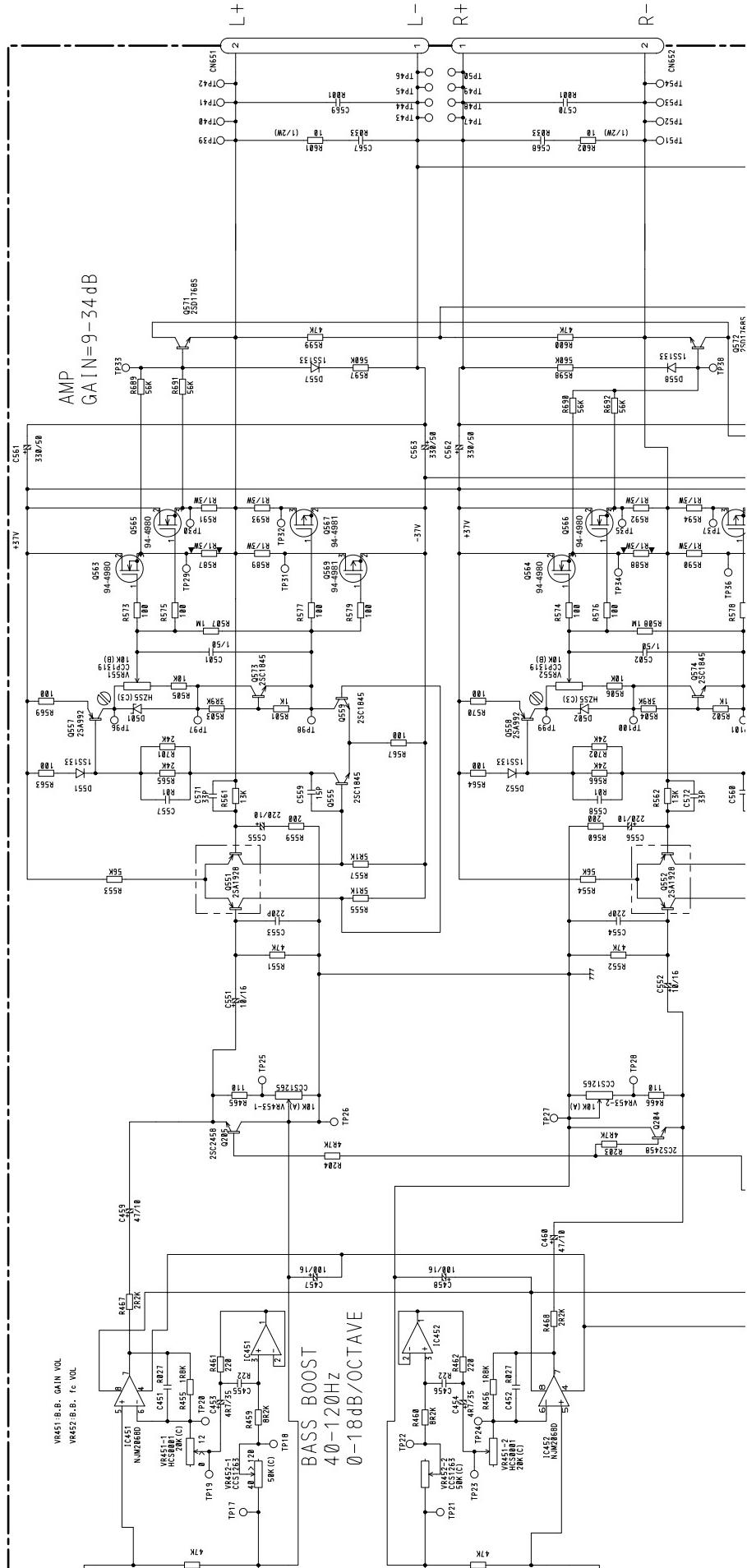
A-a A-b

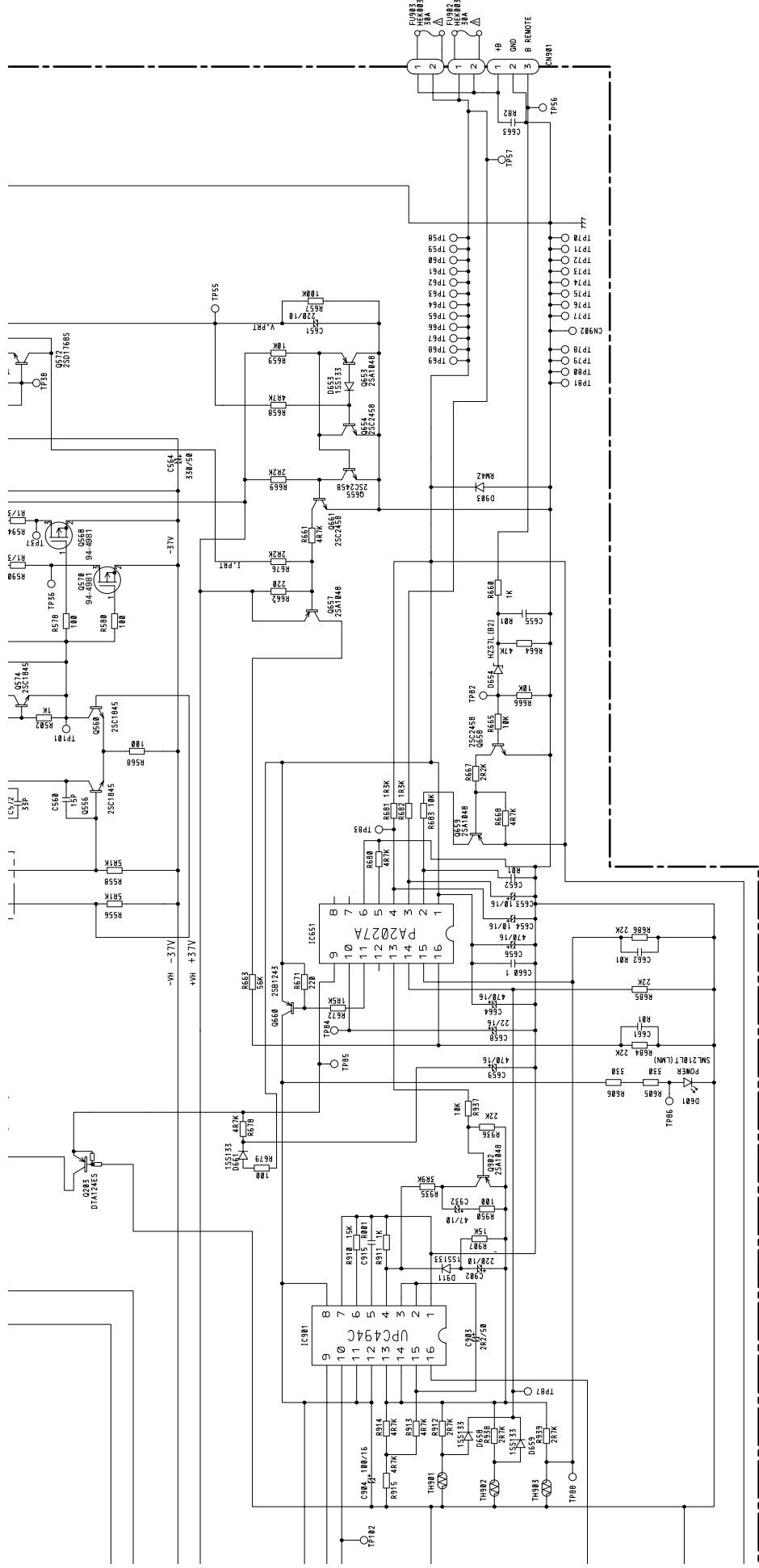
A

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A-b



A-a A-b

D1

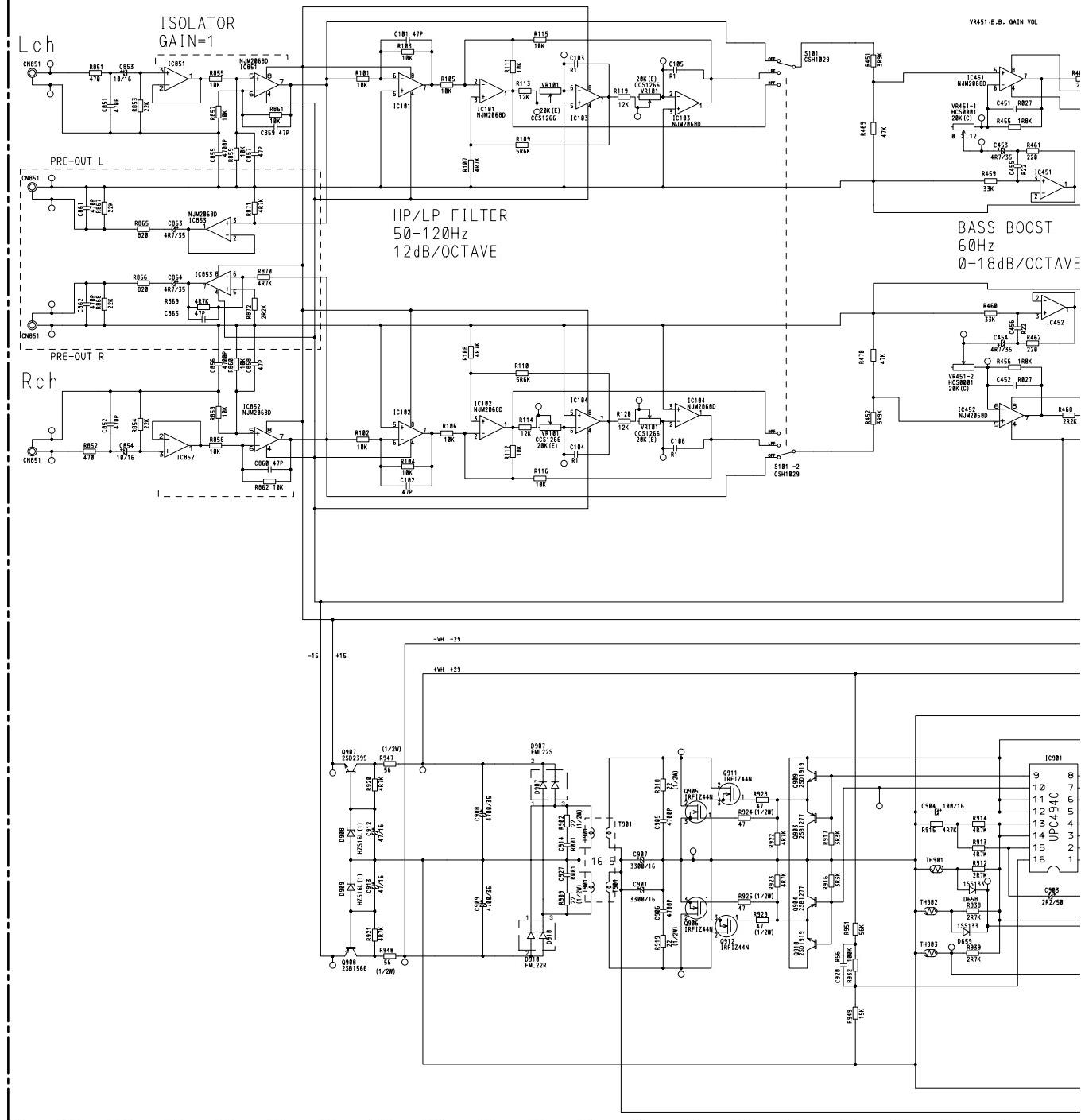
A-b

3.3 AMP UNIT(GUIDE PAGE)(PRS-X220/X1R/UC)

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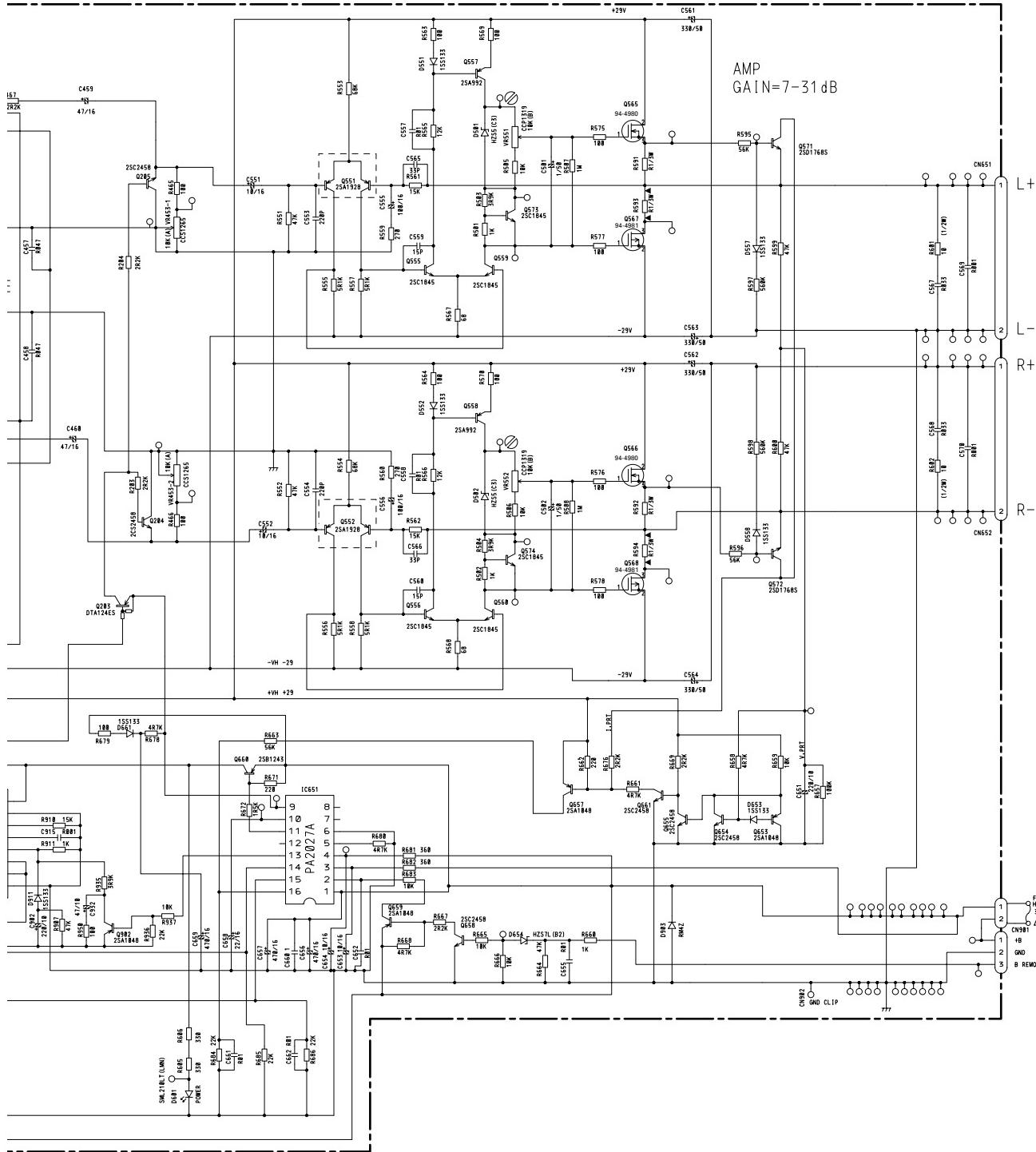
AMP UNIT



22

A

A-b



A

A-b

A

B

C

D

AMP UNIT

SOLATOR

ANSWER

ANSWER

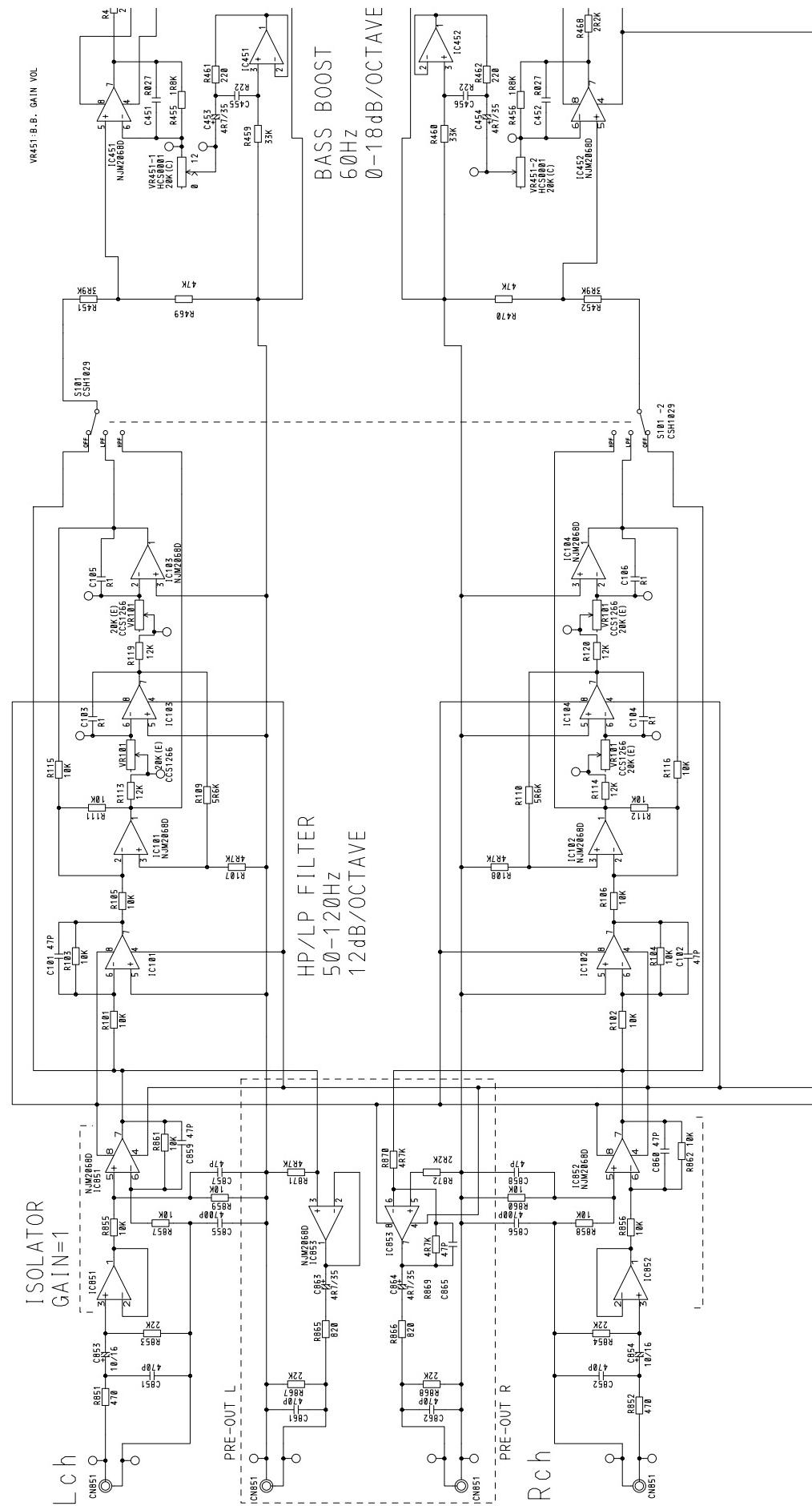
VR451:B.B. GAIN VOL

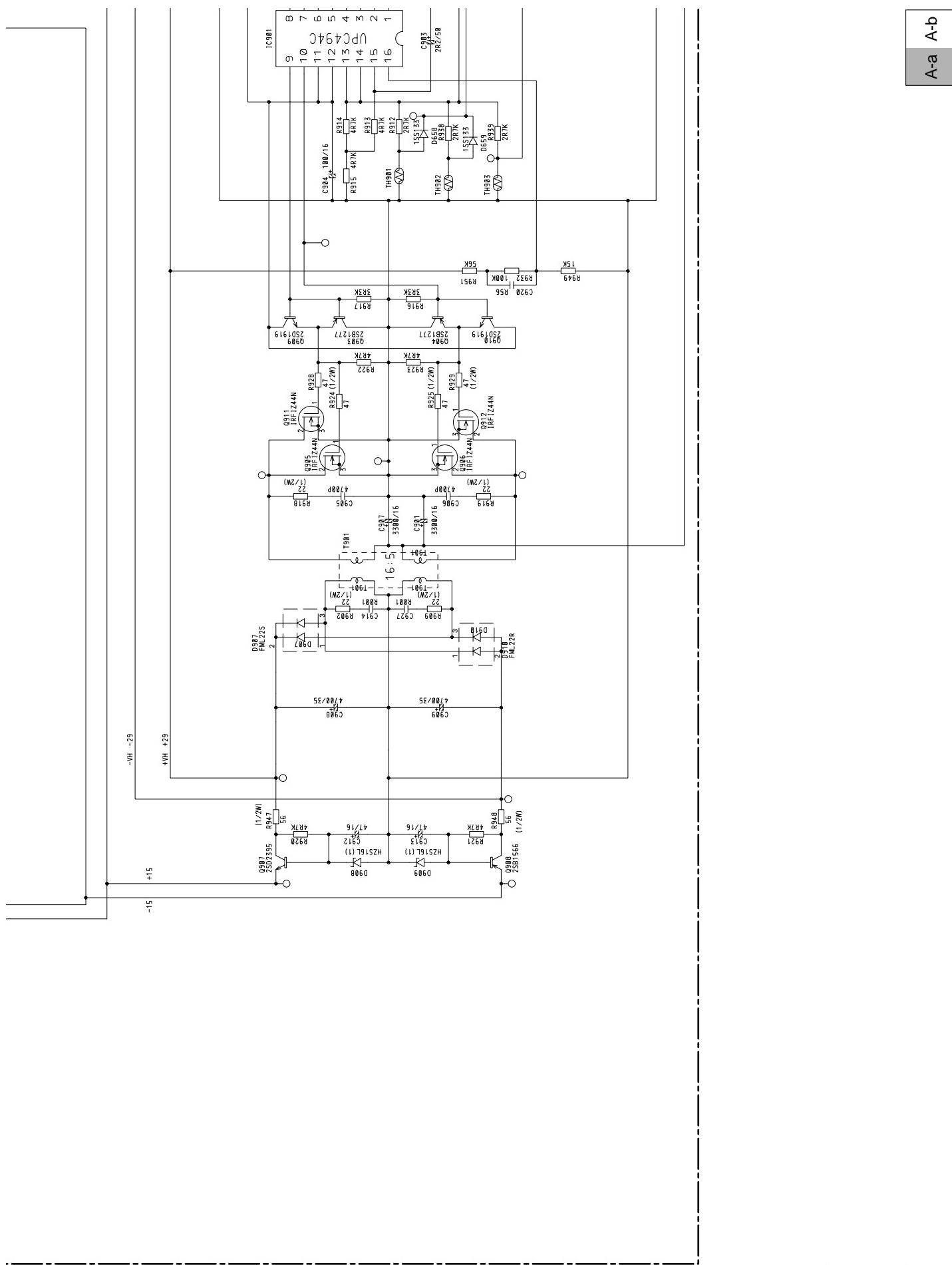
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A-a A-b

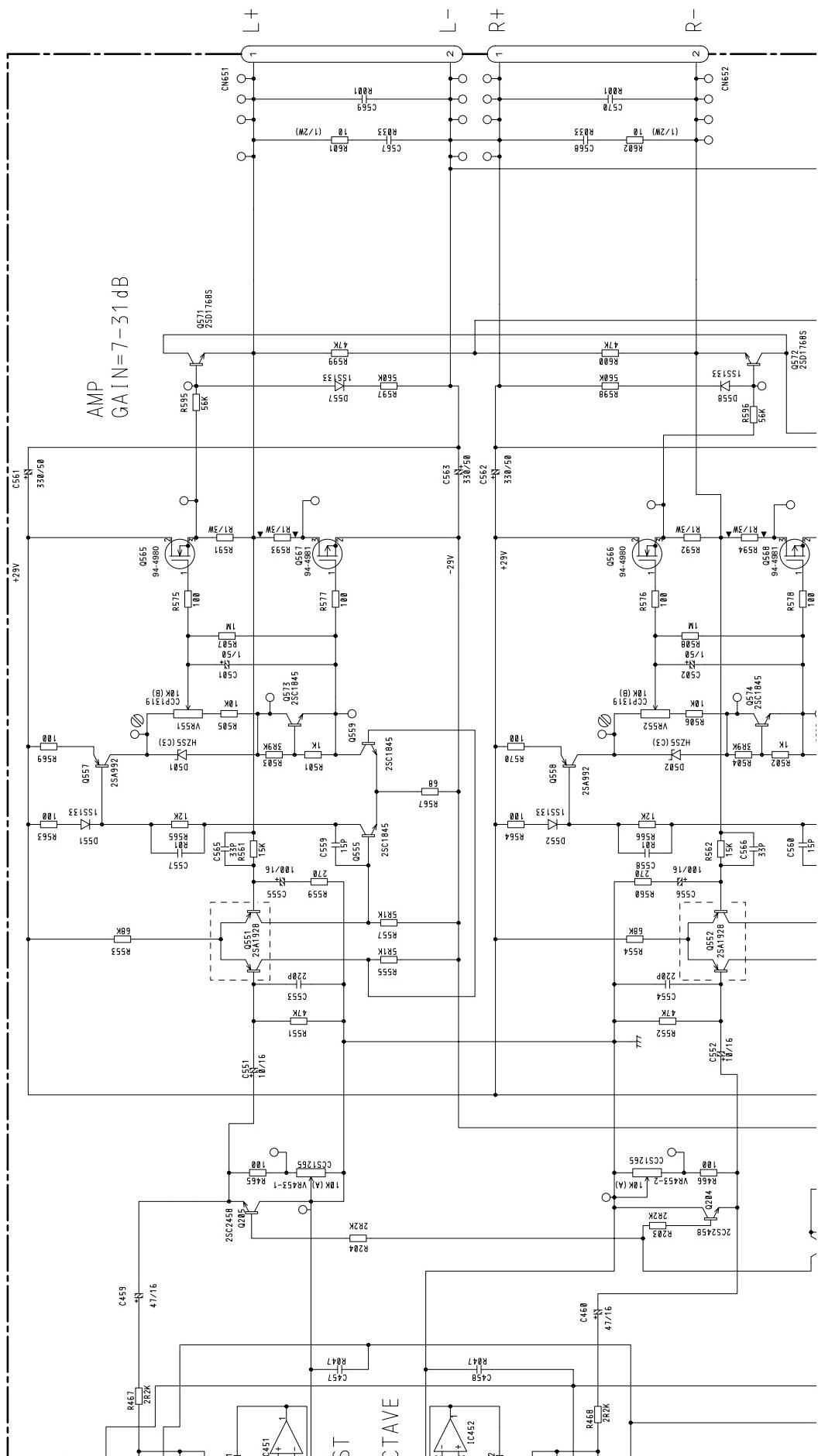
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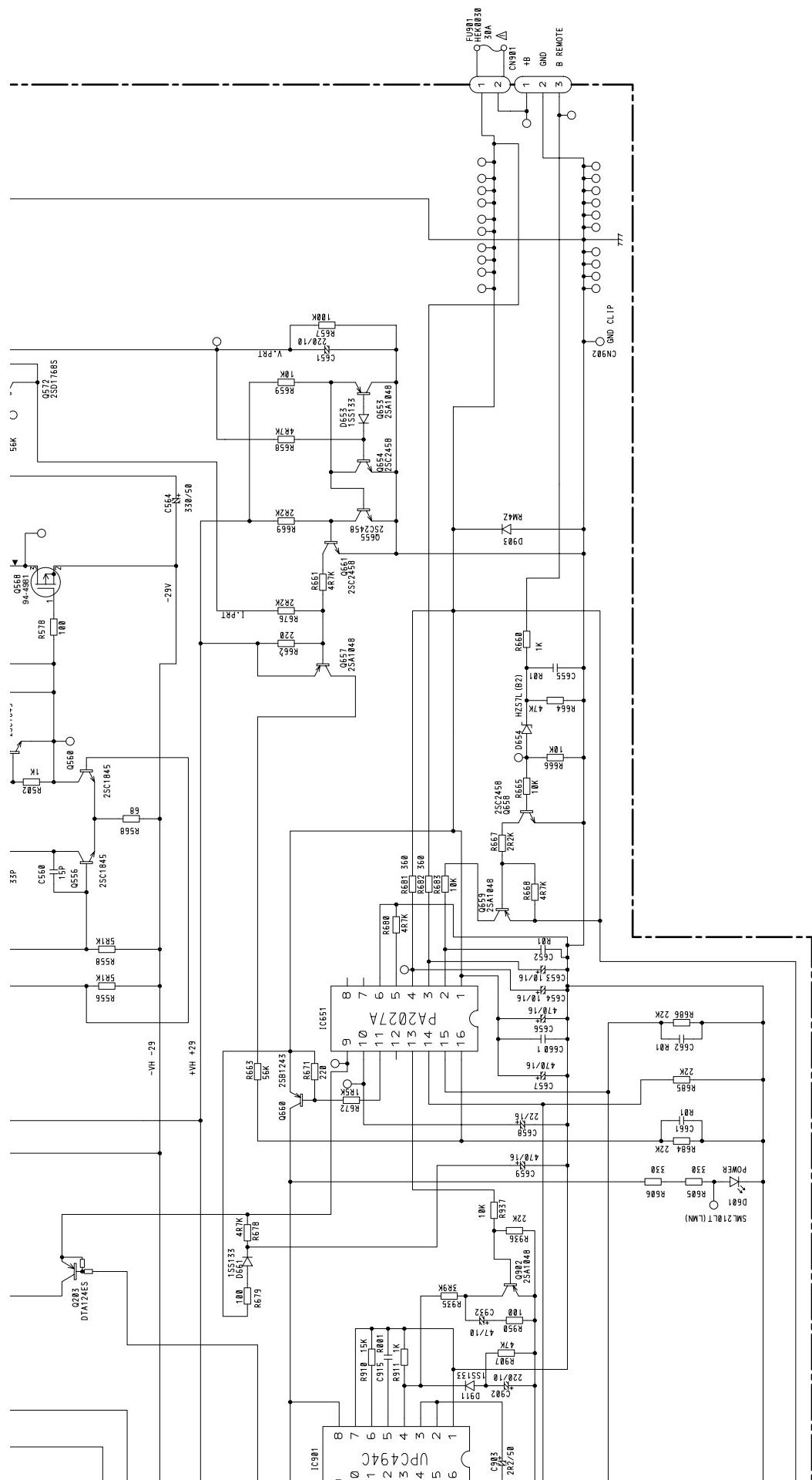
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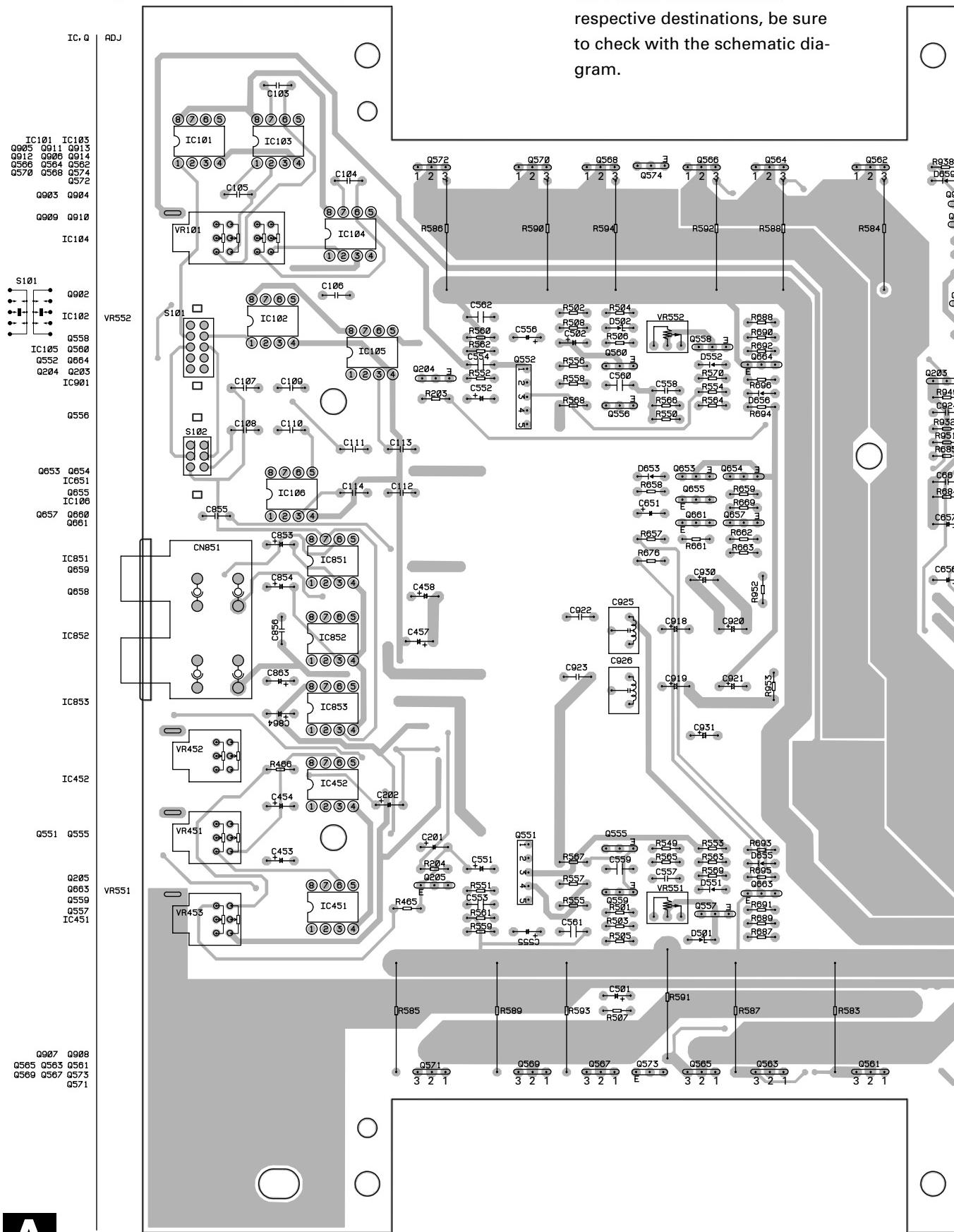
27

4. PCB CONNECTION DIAGRAM

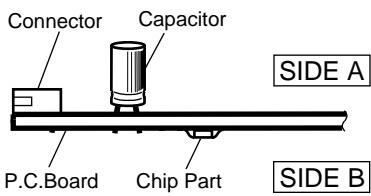
4.1 AMP UNIT(PRS-X720/X1R/UC)

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination. For further information for respective destinations, be sure to check with the schematic diagram.



2. Viewpoint of PCB diagrams

**A** AMP UNIT

SIDE A

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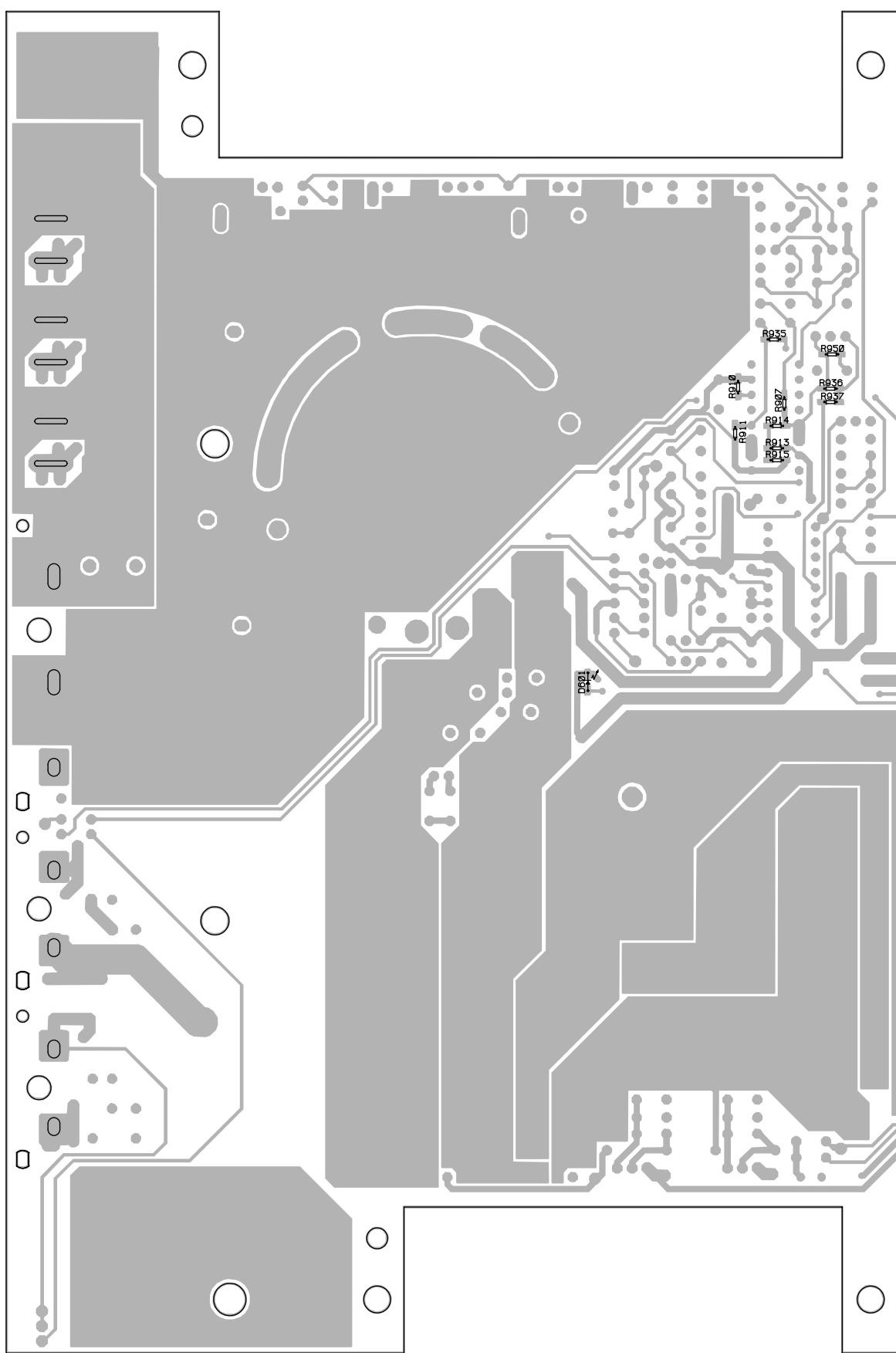
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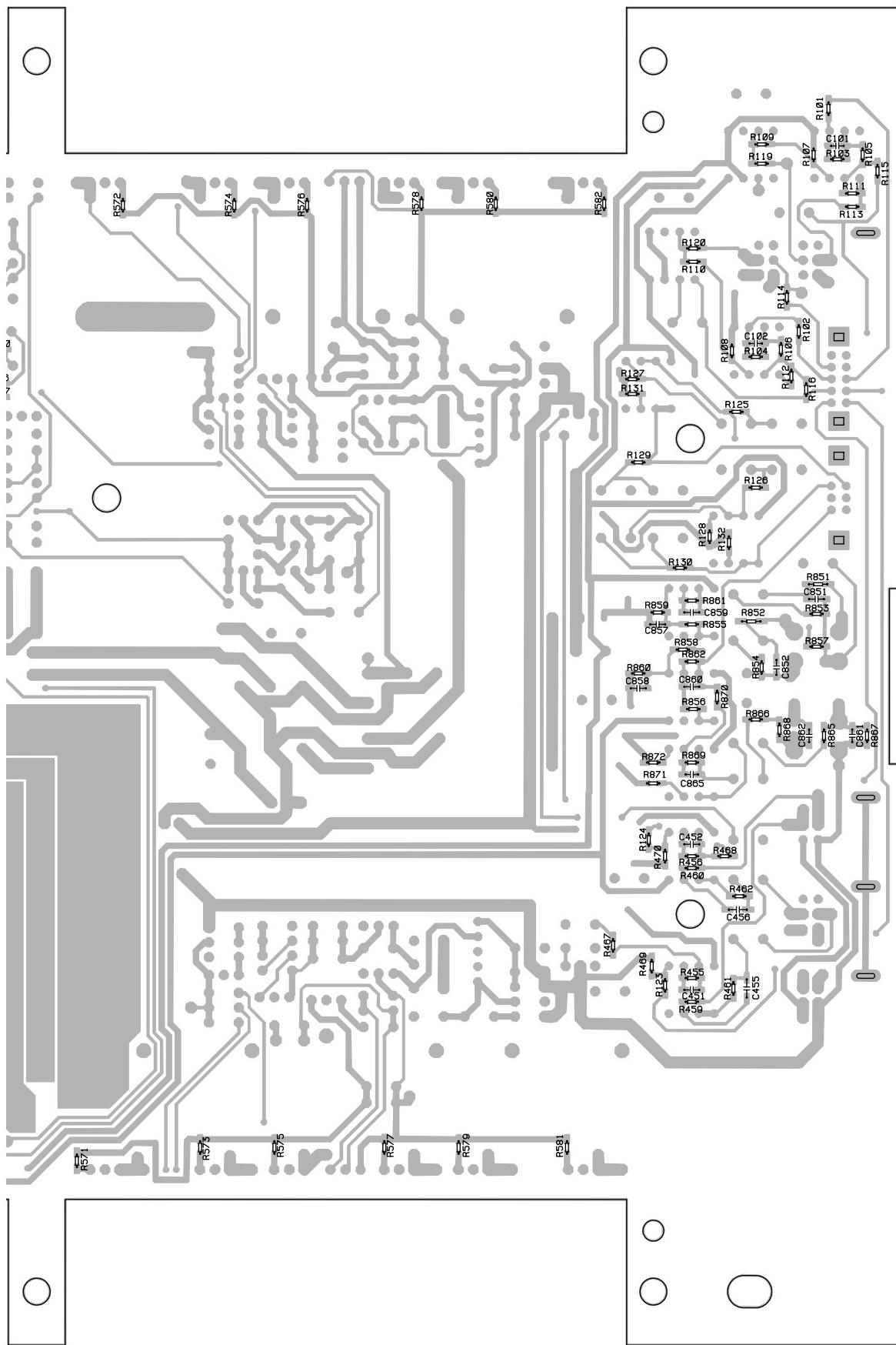
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A AMP UNIT

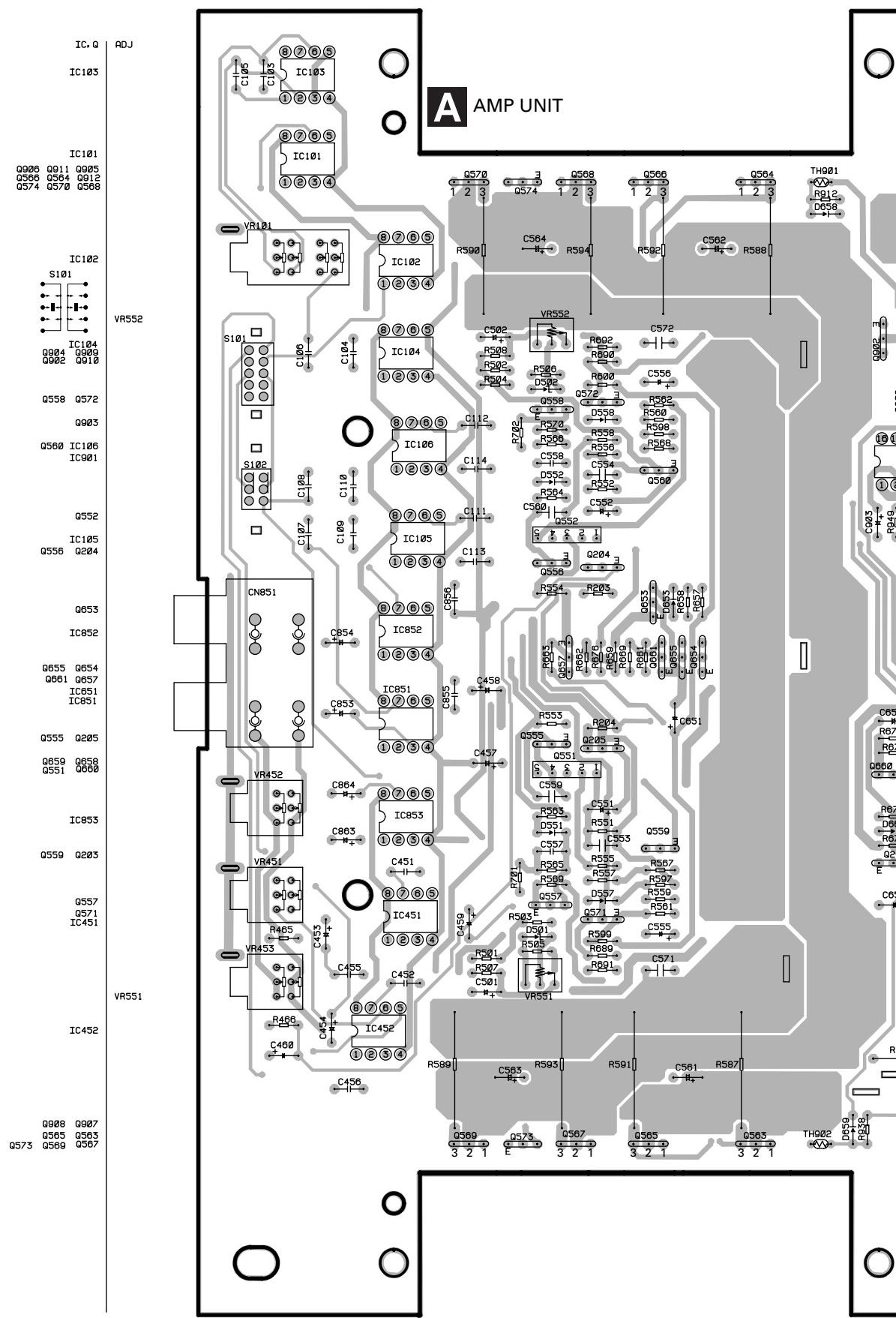
SIDE B



31

4.2 AMP UNIT(PRS-X320/X1R/UC)

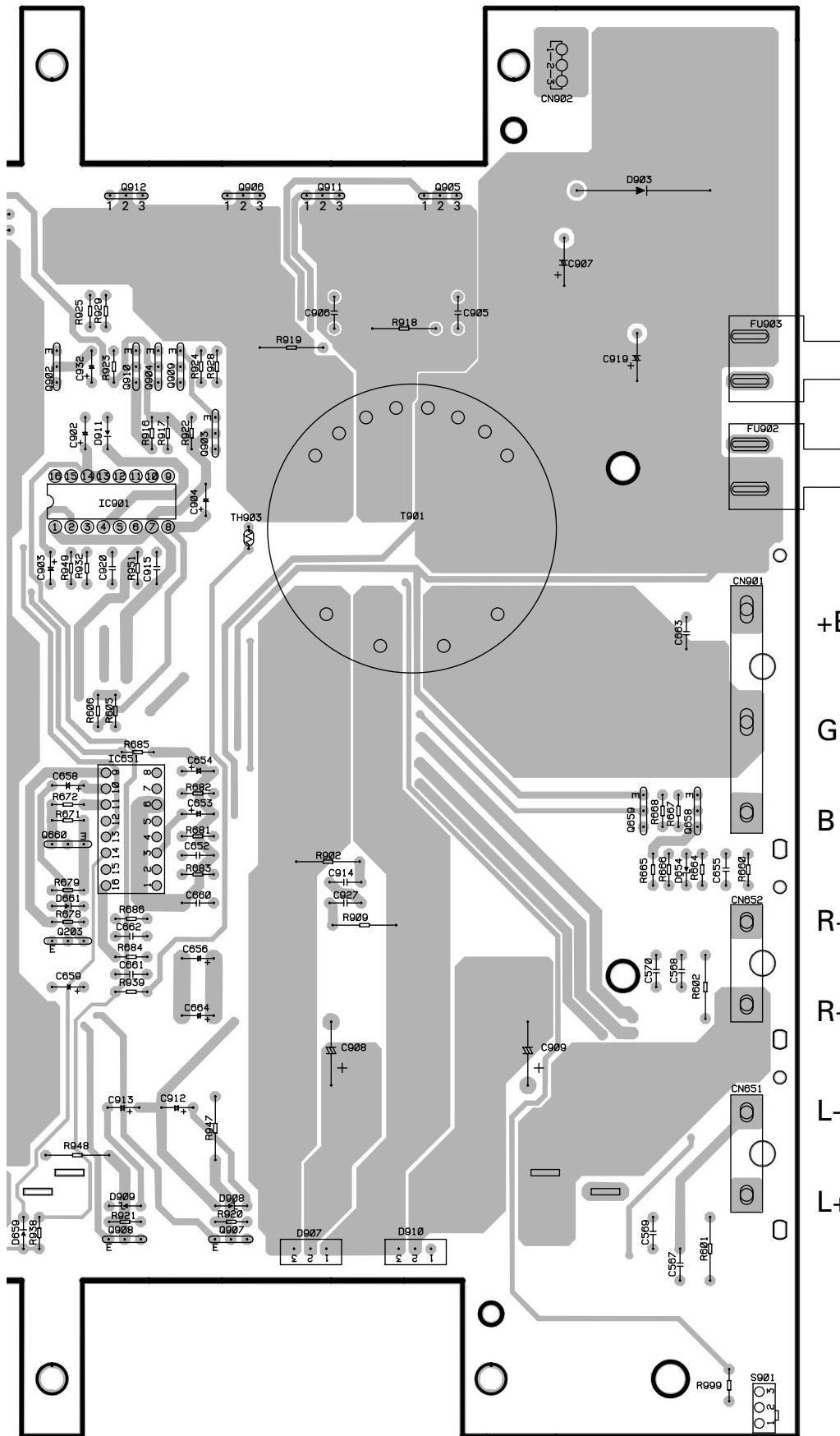
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32

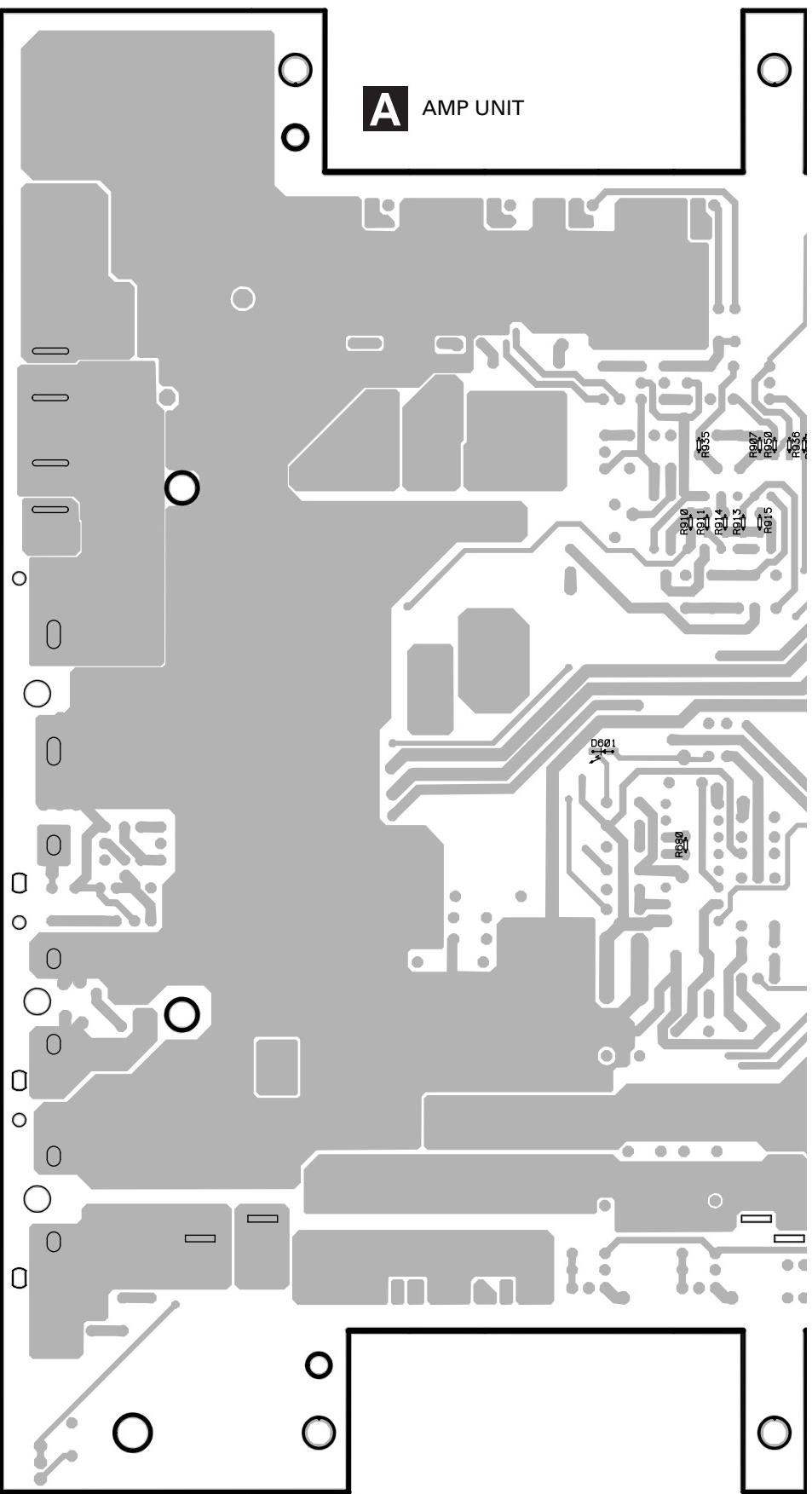
A

SIDE A

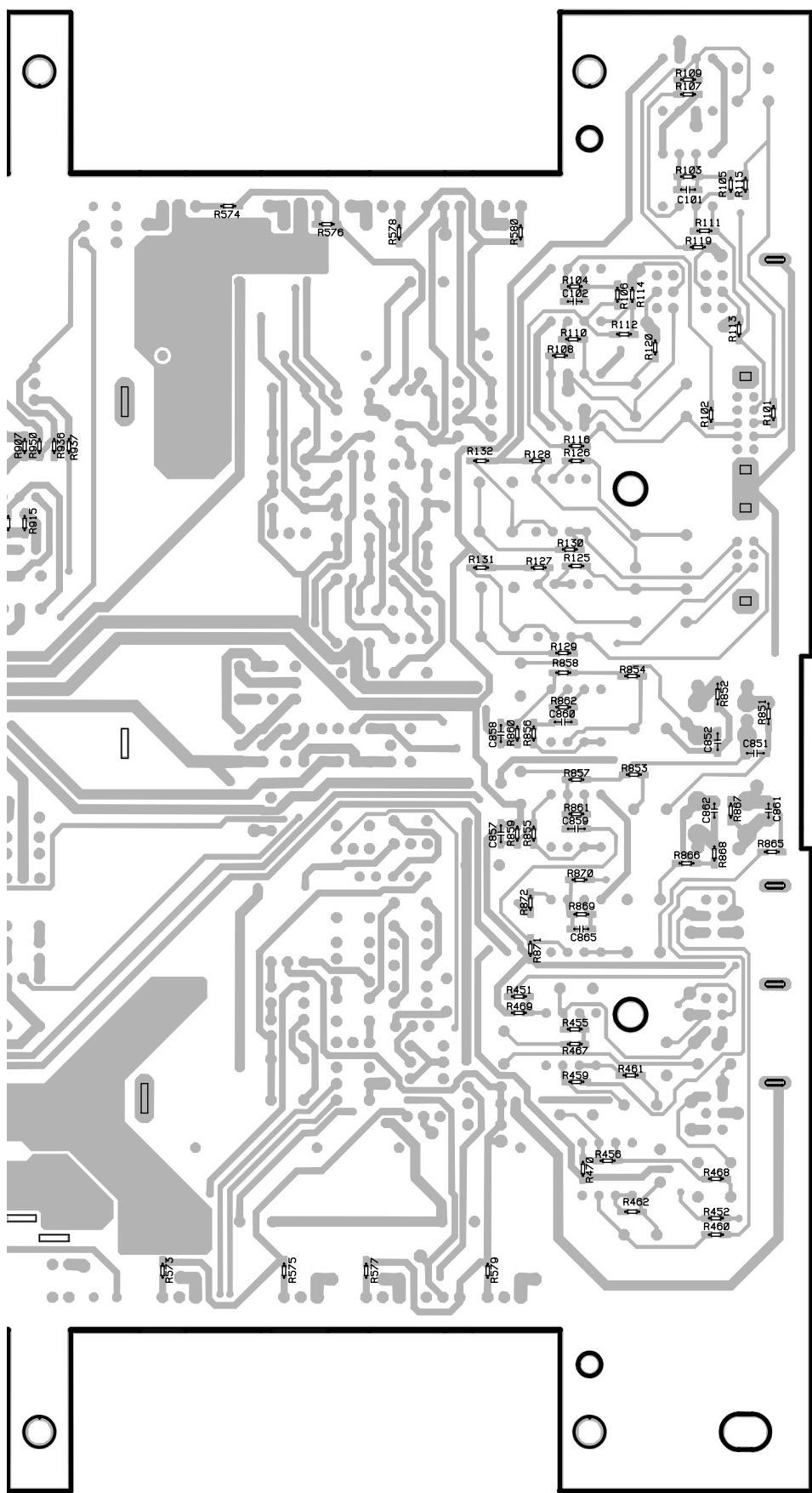


A

33



SIDE B



4

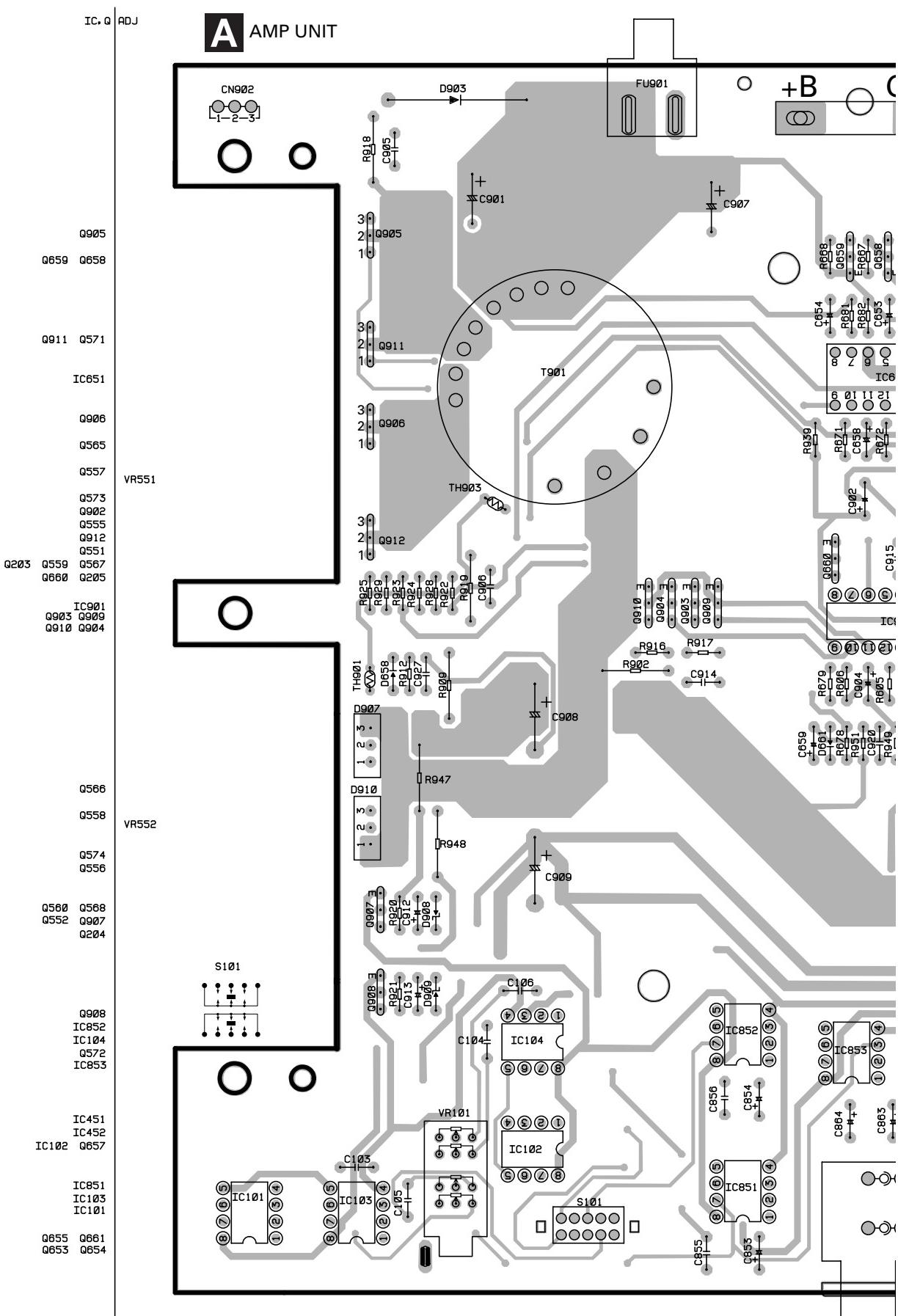
B

6

D

A

4.3 AMP UNIT(PRS-X220/X1R/UC)

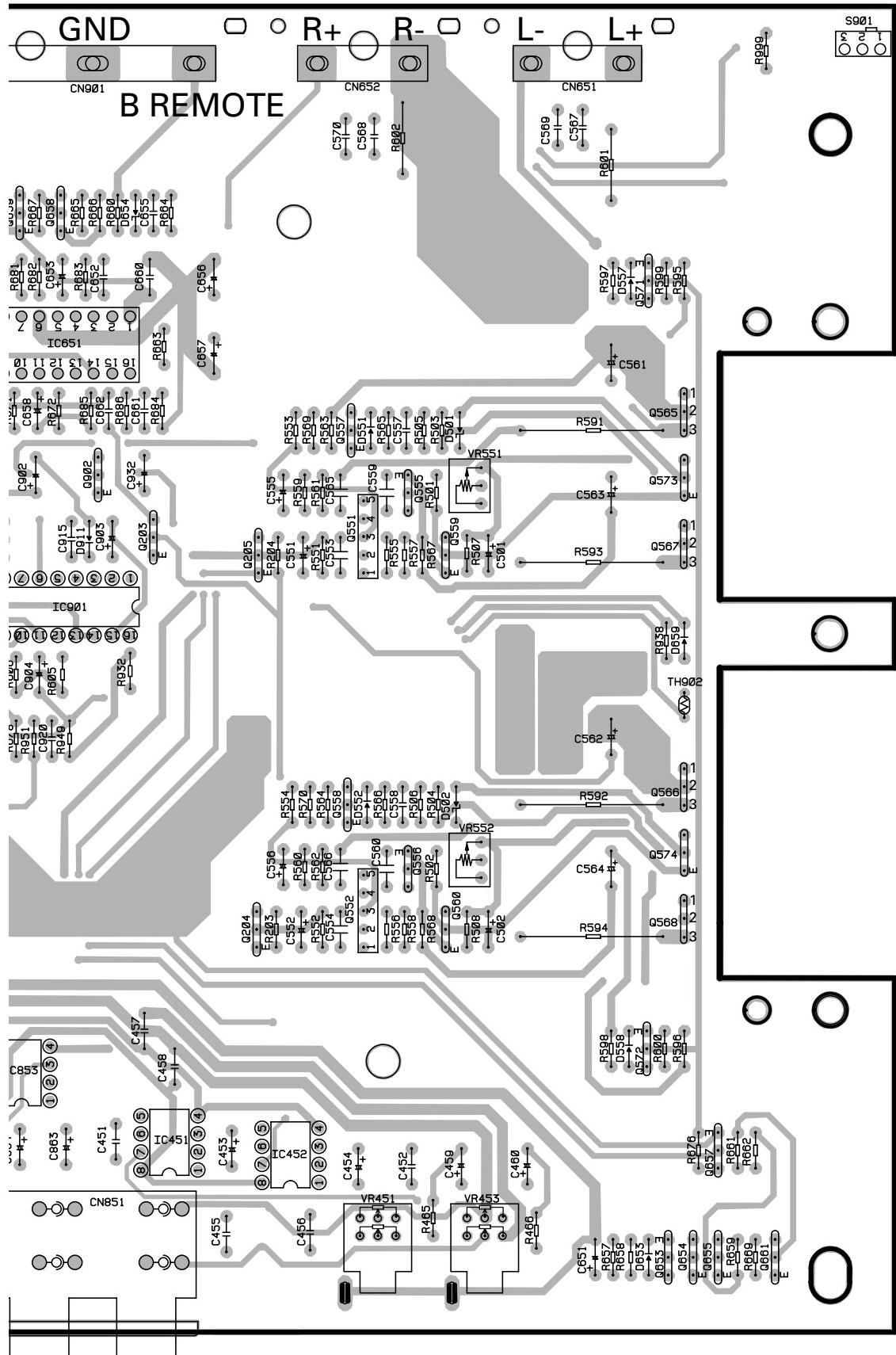


5

6

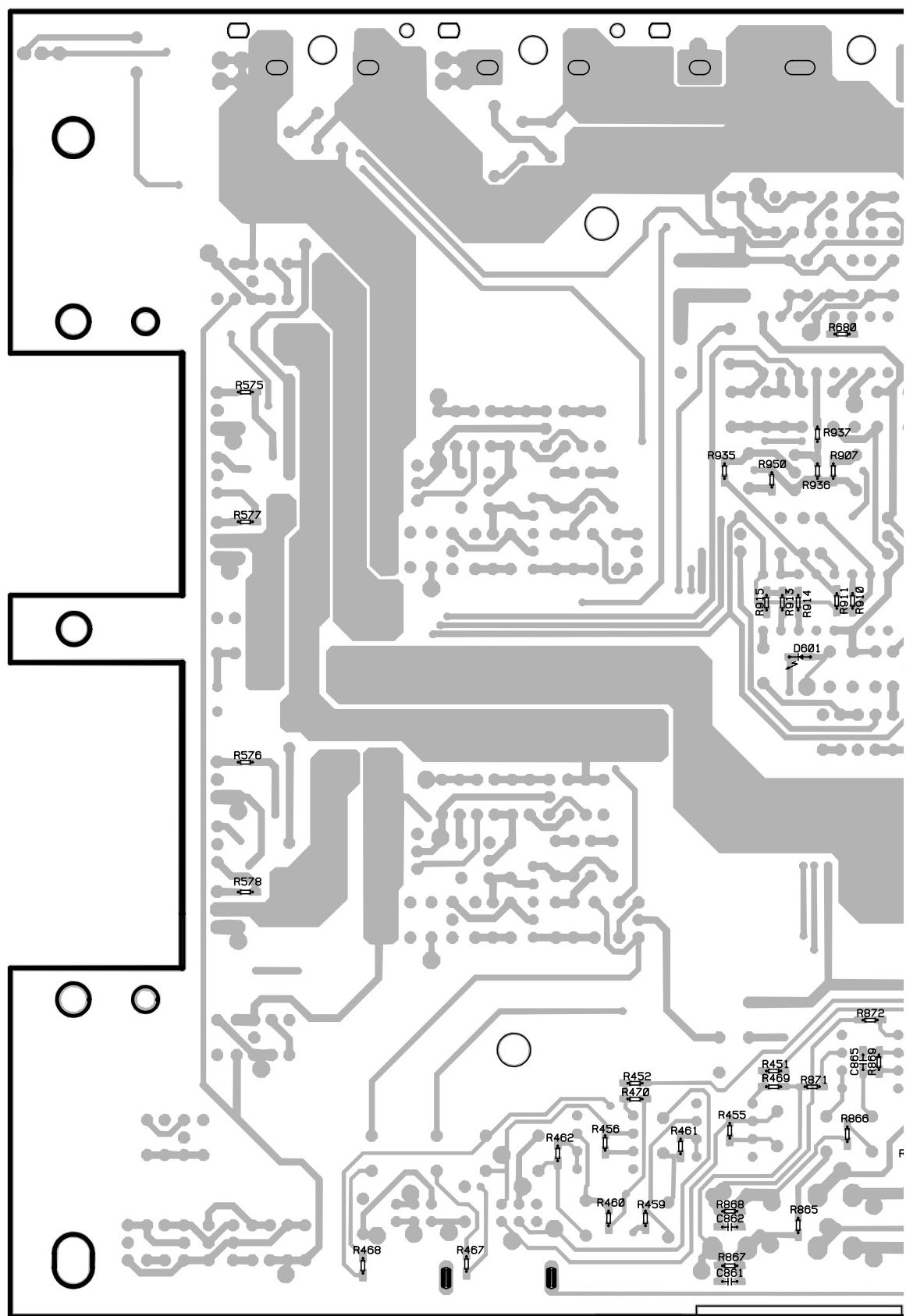
7

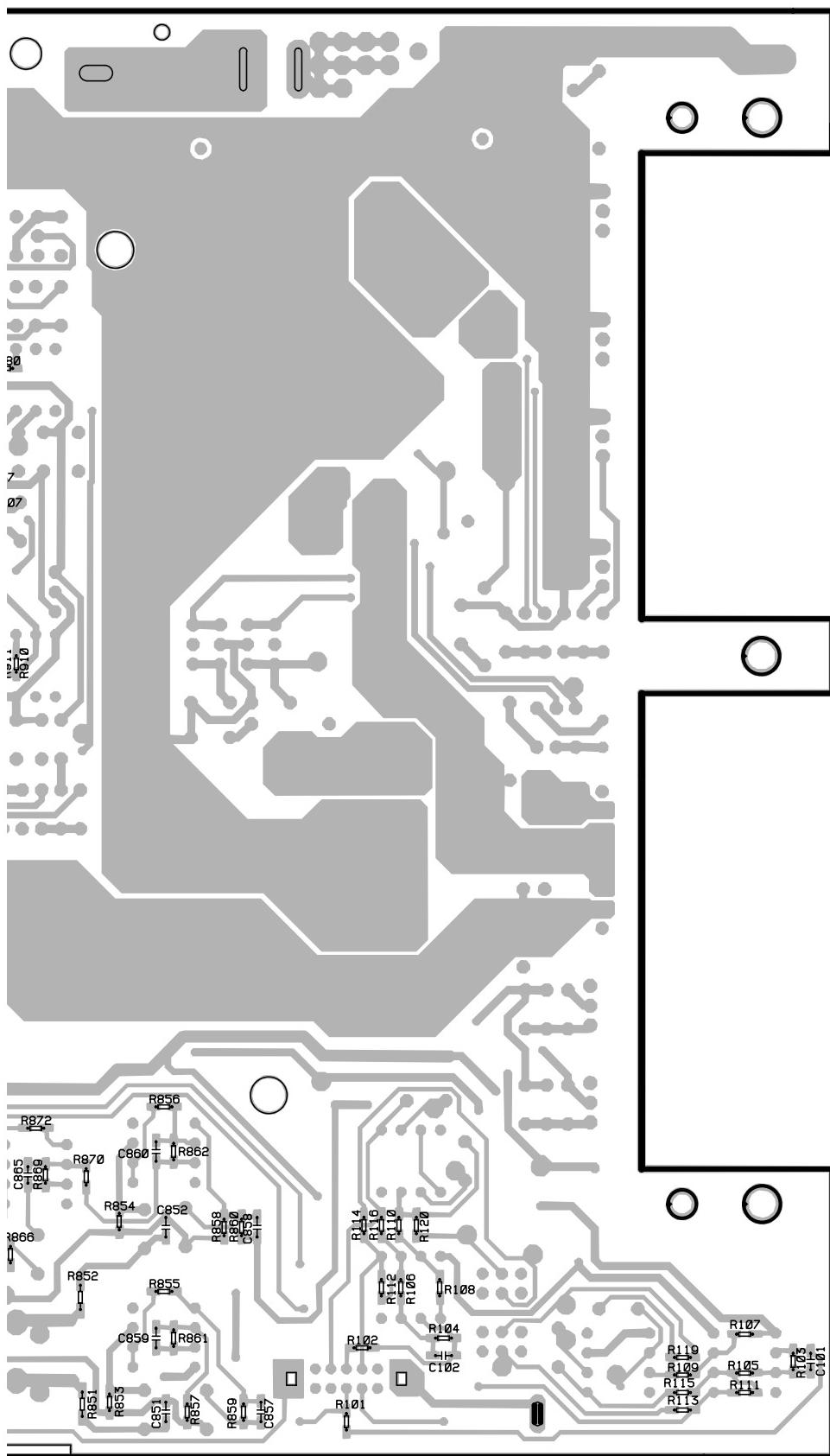
SIDE A



A

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A AMP UNIT

SIDE B

5. ELECTRICAL PARTS LIST

NOTES:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/OS000J, RS1/OOS000J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

=====Circuit Symbol and No.=====			Part Name	Part No.	=====Circuit Symbol and No.=====	Part Name	Part No.
A	Unit Number : HWH0091(PRS-X720/X1R/UC)			Q 904	Transistor		2SB1277
	Unit Name : Amp Unit			Q 905	FET		STP50NE08
	MISCELLANEOUS			Q 906	FET		STP50NE08
IC 101	IC	NJM2068D		Q 907	Transistor		2SD2395
IC 102	IC	NJM2068D		Q 908	Transistor		2SB1566
IC 103	IC	NJM2068D		Q 909	Transistor		2SD1919
IC 104	IC	NJM2068D		Q 910	Transistor		2SD1919
IC 105	IC	NJM2068D		Q 911	FET		STP50NE08
IC 106	IC	NJM2068D		Q 912	FET		STP50NE08
IC 451	IC	NJM2068D		Q 913	FET		STP50NE08
IC 452	IC	NJM2068D		D 501	Diode		HZS5(C3)
IC 651	IC	PA2027A		D 502	Diode		HZS5(C3)
IC 851	IC	NJM2068D		D 551	Diode		1SS133
IC 852	IC	NJM2068D		D 552	Diode		1SS133
IC 853	IC	NJM2068D		D 601	LED		SML210LT(LMN)
IC 901	IC	UPC494C		D 651	Diode		RM4Z
Q 203	Transistor	DTA124ES		D 652	Diode		RM4Z
Q 204	Transistor	2SC2458		D 653	Diode		1SS133
				D 654	Diode		HZS7L(B2)
Q 205	Transistor	2SC2458		D 655	Diode		1SS133
Q 551	Transistor	2SA1928		D 656	Diode		1SS133
Q 552	Transistor	2SA1928		D 658	Diode		1SS133
Q 555	Transistor	2SC1845		D 659	Diode		1SS133
Q 556	Transistor	2SC1845		D 661	Diode		1SS133
Q 557	Transistor	2SA992		D 907	Diode		FML22R
Q 558	Transistor	2SA992		D 908	Diode		HZS16L(1)
Q 559	Transistor	2SC1845		D 909	Diode		HZS16L(1)
Q 560	Transistor	2SC1845		D 910	Diode		FML22S
Q 561	FET	94-4980		D 911	Diode		1SS133
Q 562	FET	94-4980		D 912	Diode		ALO1ZWS
Q 563	FET	94-4980		D 913	Diode		ALO1ZWS
Q 564	FET	94-4980		D 914	Diode		ALO1ZWS
Q 565	FET	94-4980		D 915	Diode		ALO1ZWS
Q 566	FET	94-4980		T 901	Transformer		HTT0003
Q 567	FET	94-4981					
Q 568	FET	94-4981		TH 901	Thermistor		CCX1013
Q 569	FET	94-4981		TH 902	Thermistor		CCX1013
Q 570	FET	94-4981		TH 903	Thermistor		CCX1035
Q 571	FET	94-4981		S 101	Switch(LPF/HPF)		CSH1029
Q 572	FET	94-4981		S 102	Switch(Subsonic)		CSH1021
Q 573	Transistor	2SC1845		VR 101	Variable Resistor 20kΩ(E)		CCS1266
Q 574	Transistor	2SC1845		VR 451	Volume 20kΩ(C)		HCS0001
Q 653	Transistor	2SA1048		VR 452	Variable Resistor 50kΩ(C)		CCS1263
Q 654	Transistor	2SC2458		VR 453	Variable Resistor 10kΩ(A)		CCS1265
Q 655	Transistor	2SC2458		VR 551	Semi-fixed 10kΩ(B)		CCP1319
Q 657	Transistor	2SA1048		VR 552	Semi-fixed 10kΩ(B)		CCP1319
Q 658	Transistor	2SC2458		FU 902	Fuse 30A		HEK0030
Q 659	Transistor	2SA1048		FU 903	Fuse 30A		HEK0030
Q 660	Transistor	2SB1243		FU 904	Fuse 30A		HEK0030
Q 661	Transistor	2SC2458					
Q 663	Transistor	2SD1768S					
Q 664	Transistor	2SD1768S					
Q 902	Transistor	2SA1048					
Q 903	Transistor	2SB1277					

====Circuit Symbol and No.====Part Name		Part No.	====Circuit Symbol and No.====Part Name	Part No.
R	101	RS1/10S103J	R	564
R	102	RS1/10S103J	R	565
R	103	RS1/10S103J	R	566
R	104	RS1/10S103J	R	567
R	105	RS1/10S103J	R	568
R	106	RS1/10S103J	R	569
R	107	RS1/10S472J	R	570
R	108	RS1/10S472J	R	571
R	109	RS1/10S562J	R	572
R	110	RS1/10S562J	R	573
R	111	RS1/10S103J	R	574
R	112	RS1/10S103J	R	575
R	113	RS1/10S123J	R	576
R	114	RS1/10S123J	R	577
R	115	RS1/10S103J	R	578
R	116	RS1/10S103J	R	579
R	119	RS1/10S123J	R	580
R	120	RS1/10S123J	R	581
R	123	RS1/10S392J	R	582
R	124	RS1/10S392J	R	583
R	125	RS1/10S103J	R	584
R	126	RS1/10S103J	R	585
R	127	RS1/10S123J	R	586
R	128	RS1/10S123J	R	587
R	129	RS1/10S392J	R	588
R	130	RS1/10S392J	R	589
R	131	RS1/10S393J	R	590
R	132	RS1/10S393J	R	591
R	203	RD1/4PU222J	R	592
R	204	RD1/4PU222J	R	593
R	455	RS1/10S182J	R	594
R	456	RS1/10S182J	R	595
R	459	RS1/10S822J	R	596
R	460	RS1/10S822J	R	605
R	461	RS1/10S221J	R	606
R	462	RS1/10S221J	R	657
R	465	RD1/4PU101J	R	658
R	466	RD1/4PU101J	R	659
R	467	RD1/4PU101J	R	660
R	468	RD1/4PU101J	R	661
R	469	RS1/10S221J	R	662
R	470	RS1/10S473J	R	663
R	501	RD1/4PU102J	R	664
R	502	RD1/4PU102J	R	665
R	503	RD1/4PU392J	R	666
R	504	RD1/4PU392J	R	667
R	505	RD1/4PU103J	R	668
R	506	RD1/4PU103J	R	669
R	507	RD1/4PU105J	R	671
R	508	RD1/4PU105J	R	672
R	549	RD1/4PU243J	R	676
R	550	RD1/4PU243J	R	678
R	551	RD1/4PU473J	R	679
R	552	RD1/4PU473J	R	680
R	553	RD1/4PU563J	R	681
R	554	RD1/4PU563J	R	682
R	555	RD1/4PU512J	R	683
R	556	RD1/4PU512J	R	684
R	557	RD1/4PU512J	R	685
R	558	RD1/4PU512J	R	686
R	559	RD1/4PU131J	R	687
R	560	RD1/4PU131J	R	688
R	561	RD1/4PU133J	R	689
R	562	RD1/4PU133J	R	690
R	563	RD1/4PU101J	R	691

=====Circuit Symbol and No.====Part Name		Part No.	=====Circuit Symbol and No.====Part Name		Part No.
---	---	-----	---	-----	-----
R 692		RD1/4PU563J	C 106		CFTNA104J50
R 693		RD1/4PU564J	C 107		CFTLA824J50
R 694		RD1/4PU564J	C 108		CFTLA824J50
R 695		RD1/4PU473J	C 109		CFTLA824J50
R 696		RD1/4PU473J	C 110		CFTLA824J50
R 851		RS1/10S471J	C 111		CFTLA824J50
R 852		RS1/10S471J	C 112		CFTLA824J50
R 853		RS1/10S223J	C 113		CFTLA824J50
R 854		RS1/10S223J	C 114		CFTLA824J50
R 855	(RN1/10SE1002D)	GGC1320	C 201		CEAS470M10
R 856	(RN1/10SE1002D)	GGC1320	C 202		CEAS470M10
R 857	(RN1/10SE1002D)	GGC1320	C 451		CKSQYB273K25
R 858	(RN1/10SE1002D)	GGC1320	C 452		CKSQYB273K25
R 859	(RN1/10SE1002D)	GGC1320	C 453		CEAS4R7M35
R 860	(RN1/10SE1002D)	GGC1320	C 454		CEAS4R7M35
R 861	(RN1/10SE1002D)	GGC1320	C 455		CKSYB224K25
R 862	(RN1/10SE1002D)	GGC1320	C 456		CKSYB224K25
R 865		RS1/10S821J	C 457		CEAS101M16
R 866		RS1/10S821J	C 458		CEAS101M16
R 867		RS1/10S223J	C 501		CEAS1R0M50
R 868		RS1/10S223J	C 502		CEAS1R0M50
R 869		RS1/10S472J	C 551		CEAS100M16
R 870		RS1/10S472J	C 552		CEAS100M16
R 871		RS1/10S472J	C 553		CKPUYB221K50
R 872		RS1/10S222J	C 554		CKPUYB221K50
R 902		RS1/2PMF220J	C 555		CEAS221M10
R 907		RS1/10S473J	C 556		CEAS221M10
R 909		RS1/2PMF220J	C 557		CFTLA103J50
R 910		RS1/10S153J	C 558		CFTLA103J50
R 911		RS1/10S102J	C 559		CCPUCH150J50
R 912		RD1/4PU272J	C 560		CCPUCH150J50
R 913		RS1/10S472J	C 561		CMA330J2H
R 914		RS1/10S472J	C 562		CMA330J2H
R 915		RS1/10S472J	C 565		CFTNA333J50
R 916		RD1/4PU332J	C 566		CFTNA333J50
R 917		RD1/4PU332J	C 567		CQMA102J50
R 918		RS1/2PMF220J	C 568		CQMA102J50
R 919		RS1/2PMF220J	C 651	220μF/10V	CCH1036
R 920		RD1/4PU472J	C 652		CFTLA103J50
R 921		RD1/4PU472J	C 653		CEAS100M16
R 922		RD1/4PU472J	C 654		CEAS100M16
R 923		RD1/4PU472J	C 655		CFTLA103J50
R 924		RD1/4PU680J	C 656	470μF/16V	CCH1183
R 925		RD1/4PU680J	C 657	470μF/16V	CCH1183
R 926		RD1/4PU680J	C 658		CEAS220M16
R 927		RD1/4PU680J	C 659	470μF/16V	CCH1183
R 928		RD1/4PU680J	C 660		CFTLA105J50
R 929		RD1/4PU680J	C 661		CFTLA103J50
R 932		RD1/4PU104J	C 662		CFTLA103J50
R 935		RS1/10S392J	C 851		CKSQYB471K50
R 936		RS1/10S223J	C 852		CKSQYB471K50
R 937		RS1/10S103J	C 853		CEAS100M16
R 938		RD1/4PU272J	C 854		CEAS100M16
R 939		RD1/4PU272J	C 855		CQMA472J50
R 947		RS1/2PMF560J	C 856		CQMA472J50
R 948		RS1/2PMF560J	C 857		CCSQCH470J50
R 949		RD1/4PU113J	C 858		CCSQCH470J50
R 950		RS1/10S101J	C 859		CCSQCH470J50
R 951		RD1/4PU823J	C 860		CCSQCH470J50
R 952		RD1/4PU101J	C 861		CKSQYB471K50
R 953		RD1/4PU101J	C 862		CKSQYB471K50
CAPACITORS			C 863		CEAS4R7M35
C 101		CCSQCH470J50	C 864		CEAS4R7M35
C 102		CCSQCH470J50	C 865		CCSQCH470J50
C 103		CFTNA104J50			CEAS221M10
C 104		CFTNA104J50			CEAS221M10
C 105		CFTNA104J50			CEAS221M10

=====Circuit Symbol and No.====Part Name			Part No.	=====Circuit Symbol and No.====Part Name			Part No.
C 903			CEAS2R2M50	Q 574	Transistor		2SC1845
C 904			CEAS101M16	Q 653	Transistor		2SA1048
C 905			CQMA472J50	Q 654	Transistor		2SC2458
C 906			CQMA472J50	Q 655	Transistor		2SC2458
C 907	4700μF/16V		CCH1310	Q 657	Transistor		2SA1048
C 908	4700μF/16V		CCH1310	Q 658	Transistor		2SC2458
C 909	4700μF/16V		CCH1310	Q 659	Transistor		2SA1048
C 910			478LBA050M2DC	Q 660	Transistor		2SB1243
C 911			478LBA050M2DC	Q 661	Transistor		2SC2458
C 912			478LBA050M2DC	Q 902	Transistor		2SA1048
C 913			478LBA050M2DC	Q 903	Transistor		2SB1277
C 914			CQMA102J50	Q 904	Transistor		2SB1277
C 915			CQMA102J50	Q 905	FET		STP50NE08
C 916			CEAS470M16	Q 906	FET		STP50NE08
C 917			CEAS470M16	Q 907	Transistor		2SD2395
C 918			337RZM050M1020	Q 908	Transistor		2SB1566
C 919			337RZM050M1020	Q 909	Transistor		2SD1919
C 920			337RZM050M1020	Q 910	Transistor		2SD1919
C 921			337RZM050M1020	Q 911	FET		STP50NE08
C 922			CFTLA224J50	Q 912	FET		STP50NE08
C 923			CFTLA224J50	D 501	Diode		HZS5(C3)
C 924			CFTLA564J50	D 502	Diode		HZS5(C3)
C 925			CCG-081	D 551	Diode		1SS133
C 926			CCG-081	D 552	Diode		1SS133
C 927			CQMA102J50	D 557	Diode		1SS133
C 930			337RZM050M1020	D 558	Diode		1SS133
C 931			337RZM050M1020	D 601	LED		SML210LT(LMN)
C 932			CEAS470M10	D 653	Diode		1SS133
				D 654	Diode		HZS7L(B2)
				D 658	Diode		1SS133
A	Unit Number	:	HWH0095(PRS-X320/X1R/UC)				
	Unit Name	:	Amp Unit				
MISCELLANEOUS							
IC 101	IC		NJM2068D	D 659	Diode		1SS133
IC 102	IC		NJM2068D	D 661	Diode		1SS133
IC 103	IC		NJM2068D	D 903	Diode		RM4Z
IC 104	IC		NJM2068D	D 907	Diode		FML22R
IC 105	IC		NJM2068D	D 908	Diode		HZS16L(1)
IC 106	IC		NJM2068D	D 909	Diode		HZS16L(1)
IC 451	IC		NJM2068D	D 910	Diode		FML22S
IC 452	IC		NJM2068D	D 911	Diode		1SS133
IC 651	IC		PA2027A	TH 901	Transformer		HTT0004
IC 851	IC		NJM2068D	TH 901	Thermistor		CCX1013
IC 852	IC		NJM2068D	TH 902	Thermistor		CCX1013
IC 853	IC		NJM2068D	TH 903	Thermistor		CCX1035
IC 901	IC		UPC494C	S 101	Switch(LPF/HPF)		CSH1029
Q 203	Transistor		DTA124ES	S 102	Switch(Subsonic)		CSH1021
Q 204	Transistor		2SC2458	VR 101	Variable Resistor 20kΩ(Ε)		CCS1266
Q 205	Transistor		2SC2458	VR 451	Volume 20kΩ(С)		HCS0001
Q 551	Transistor		2SA1928	VR 452	Variable Resistor 50kΩ(С)		CCS1263
Q 552	Transistor		2SA1928	VR 453	Variable Resistor 10kΩ(Α)		CCS1265
Q 555	Transistor		2SC1845	VR 551	Semi-fixed 10kΩ(Β)		CCP1319
Q 556	Transistor		2SC1845	VR 552	Semi-fixed 10kΩ(Β)		CCP1319
Q 557	Transistor		2SA992	FU 902	Fuse 30A		HEK0030
Q 558	Transistor		2SA992	FU 903	Fuse 30A		HEK0030
Q 559	Transistor		2SC1845	RESISTORS			
Q 560	Transistor		2SC1845	R 101			RS1/10S103J
Q 563	FET		94-4980	R 102			RS1/10S103J
Q 564	FET		94-4980	R 103			RS1/10S103J
Q 565	FET		94-4980	R 104			RS1/10S103J
Q 566	FET		94-4980	R 105			RS1/10S103J
Q 567	FET		94-4981	R 106			RS1/10S103J
Q 568	FET		94-4981	R 107			RS1/10S472J
Q 569	FET		94-4981	R 108			RS1/10S472J
Q 570	FET		94-4981	R 109			RS1/10S562J
Q 571	Transistor		2SD1768S	R 110			RS1/10S562J
Q 572	Transistor		2SD1768S				
Q 573	Transistor		2SC1845				

====Circuit Symbol and No.==Part Name		Part No.	====Circuit Symbol and No.==Part Name		Part No.
R 111		RS1/10S103J	R 578		RS1/10S101J
R 112		RS1/10S103J	R 579		RS1/10S101J
R 113		RS1/10S123J	R 580		RS1/10S101J
R 114		RS1/10S123J	R 587		SPR30R1J
R 115		RS1/10S103J	R 588		SPR30R1J
R 116		RS1/10S103J	R 589		SPR30R1J
R 119		RS1/10S123J	R 590		SPR30R1J
R 120		RS1/10S123J	R 591		SPR30R1J
R 125		RS1/10S103J	R 592		SPR30R1J
R 126		RS1/10S103J	R 593		SPR30R1J
R 127		RS1/10S123J	R 594		SPR30R1J
R 128		RS1/10S123J	R 597		RD1/4PU564J
R 129		RS1/10S392J	R 598		RD1/4PU564J
R 130		RS1/10S392J	R 599		RD1/4PU473J
R 131		RS1/10S393J	R 600		RD1/4PU473J
R 132		RS1/10S393J	R 601		RS1/2PMF100J
R 203		RD1/4PU472J	R 602		RS1/2PMF100J
R 204		RD1/4PU472J	R 605		RD1/4PU331J
R 451		RS1/10S392J	R 606		RD1/4PU331J
R 452		RS1/10S392J	R 657		RD1/4PU104J
R 455		RS1/10S182J	R 658		RD1/4PU472J
R 456		RS1/10S182J	R 659		RD1/4PU103J
R 459		RS1/10S822J	R 660		RD1/4PU102J
R 460		RS1/10S822J	R 661		RD1/4PU472J
R 461		RS1/10S221J	R 662		RD1/4PU221J
R 462		RS1/10S221J	R 663		RD1/4PU563J
R 465		RD1/4PU111J	R 664		RD1/4PU473J
R 466		RD1/4PU111J	R 665		RD1/4PU103J
R 467		RS1/10S222J	R 666		RD1/4PU103J
R 468		RS1/10S222J	R 667		RD1/4PU222J
R 469		RS1/10S473J	R 668		RD1/4PU472J
R 470		RS1/10S473J	R 669		RD1/4PU222J
R 501		RD1/4PU102J	R 671		RD1/4PU221J
R 502		RD1/4PU102J	R 672		RD1/4PU152J
R 503		RD1/4PU392J	R 676		RD1/4PU222J
R 504		RD1/4PU392J	R 678		RD1/4PU472J
R 505		RD1/4PU103J	R 679		RD1/4PU101J
R 506		RD1/4PU103J	R 680		RS1/10S472J
R 507		RD1/4PU105J	R 681		RD1/4PU132J
R 508		RD1/4PU105J	R 682		RD1/4PU132J
R 551		RD1/4PU473J	R 683		RD1/4PU103J
R 552		RD1/4PU473J	R 684		RD1/4PU223J
R 553		RD1/4PU563J	R 685		RD1/4PU223J
R 554		RD1/4PU563J	R 686		RD1/4PU223J
R 555		RD1/4PU512J	R 689		RD1/4PU563J
R 556		RD1/4PU512J	R 690		RD1/4PU563J
R 557		RD1/4PU512J	R 691		RD1/4PU563J
R 558		RD1/4PU512J	R 692		RD1/4PU563J
R 559		RD1/4PU201J	R 701		RD1/4PU243J
R 560		RD1/4PU201J	R 702		RD1/4PU243J
R 561		RD1/4PU133J	R 851		RS1/10S471J
R 562		RD1/4PU133J	R 852		RS1/10S471J
R 563		RD1/4PU101J	R 853		RS1/10S223J
R 564		RD1/4PU101J	R 854		RS1/10S223J
R 565		RD1/4PU243J	R 855	(RN1/10SE1002D)	GGC1320
R 566		RD1/4PU243J	R 856	(RN1/10SE1002D)	GGC1320
R 567		RD1/4PU101J	R 857	(RN1/10SE1002D)	GGC1320
R 568		RD1/4PU101J	R 858	(RN1/10SE1002D)	GGC1320
R 569		RD1/4PU101J	R 859	(RN1/10SE1002D)	GGC1320
R 570		RD1/4PU101J	R 860	(RN1/10SE1002D)	GGC1320
R 573		RS1/10S101J	R 861	(RN1/10SE1002D)	GGC1320
R 574		RS1/10S101J	R 862	(RN1/10SE1002D)	GGC1320
R 575		RS1/10S101J	R 865		RS1/10S821J
R 576		RS1/10S101J	R 866		RS1/10S821J
R 577		RS1/10S101J	R 867		RS1/10S223J

=====Circuit Symbol and No.====Part Name		Part No.	=====Circuit Symbol and No.====Part Name		Part No.
---	---	-----	---	-----	-----
R 868		RS1/10S223J	C 502		CEAS1R0M50
R 869		RS1/10S472J	C 551		CEAS100M16
R 870		RS1/10S472J	C 552		CEAS100M16
R 871		RS1/10S472J	C 553		CKPUYB221K50
R 872		RS1/10S222J	C 554		CKPUYB221K50
R 902		RS1/2PMF220J	C 555		CEAS221M10
R 907		RS1/10S153J	C 556		CEAS221M10
R 909		RS1/2PMF220J	C 557		CFTLA103J50
R 910		RS1/10S153J	C 558		CFTLA103J50
R 911		RS1/10S102J	C 559		CCPUCH150J50
R 912		RD1/4PU272J	C 560		CCPUCH150J50
R 913		RS1/10S472J	C 561		337RZM050M1020
R 914		RS1/10S472J	C 562		337RZM050M1020
R 915		RS1/10S472J	C 563		337RZM050M1020
R 916		RD1/4PU332J	C 564		337RZM050M1020
R 917		RD1/4PU332J	C 567		CFTNA333J50
R 918		RS1/2PMF220J	C 568		CFTNA333J50
R 919		RS1/2PMF220J	C 569		CQMA102J50
R 920		RD1/4PU472J	C 570		CQMA102J50
R 921		RD1/4PU472J	C 571		CMA330J2H
R 922		RD1/4PU472J	C 572		CMA330J2H
R 923		RD1/4PU472J	C 651	220μF/10V	CCH1036
R 924		RD1/4PU470J	C 652		CFTLA103J50
R 925		RD1/4PU470J	C 653		CEAS100M16
R 928		RD1/4PU470J	C 654		CEAS100M16
R 929		RD1/4PU470J	C 655		CFTLA103J50
R 932		RD1/4PU104J	C 656	470μF/16V	CCH1183
R 935		RS1/10S392J	C 658		CEAS220M16
R 936		RS1/10S223J	C 659	470μF/16V	CCH1183
R 937		RS1/10S103J	C 660		CFTLA105J50
R 938		RD1/4PU272J	C 661		CFTLA103J50
R 939		RD1/4PU272J	C 662		CFTLA103J50
R 947		RS1/2PMF560J	C 663		CFTLA824J50
R 948		RS1/2PMF560J	C 664	470μF/16V	CCH1183
R 949		RD1/4PU163J	C 851		CKSQYB471K50
R 950		RS1/10S101J	C 852		CKSQYB471K50
R 951		RD1/4PU124J	C 853		CEAS100M16
CAPACITORS			C 854		CEAS100M16
C 101		CCSQCH470J50	C 855		CQMA472J50
C 102		CCSQCH470J50	C 856		CQMA472J50
C 103		CFTNA104J50	C 857		CCSQCH470J50
C 104		CFTNA104J50	C 858		CCSQCH470J50
C 105		CFTNA104J50	C 859		CCSQCH470J50
C 106		CFTNA104J50	C 860		CCSQCH470J50
C 107		CFTLA824J50	C 861		CCSQCH470J50
C 108		CFTLA824J50	C 862		CKSQYB471K50
C 109		CFTLA824J50	C 863		CEAS4R7M35
C 110		CFTLA824J50	C 864		CEAS4R7M35
C 111		CFTLA824J50	C 865		CCSQCH470J50
C 112		CFTLA824J50	C 902		CEAS221M10
C 113		CFTLA824J50	C 903		CEAS2R2M50
C 114		CFTLA824J50	C 904		CEAS101M16
C 451		CFTNA273J50	C 905		CQMA472J50
C 452		CFTNA273J50	C 906	4700μF/16V	CQMA472J50
C 453		CEAS4R7M35	C 907		CCH1310
C 454		CEAS4R7M35	C 908		478LBA050M2DC
C 455		CFTLA224J50	C 909		478LBA050M2DC
C 456		CFTLA224J50	C 912		CEAS470M16
C 457		CEAS101M16	C 913		CEAS470M16
C 458		CEAS101M16	C 914		CQMA102J50
C 459		CEAS470M10	C 915		CQMA102J50
C 460		CEAS470M10	C 919	4700μF/16V	CCH1310
C 501		CEAS1R0M50	C 920		CFTLA564J50
			C 927		CQMA102J50
			C 932		CEAS470M10

=====Circuit Symbol and No.====Part Name			Part No.	=====Circuit Symbol and No.====Part Name			Part No.
A	Unit Number	:	HWH0099(PRS-X220/X1R/UC)	D	661	Diode	1SS133
	Unit Name	:	Amp Unit	D	903	Diode	RM4Z
				D	907	Diode	FML22S
				D	908	Diode	HZS16L(1)
				D	909	Diode	HZS16L(1)
	MISCELLANEOUS						
IC	101	IC	NJM2068D	D	910	Diode	FML22R
IC	102	IC	NJM2068D	D	911	Diode	1SS133
IC	103	IC	NJM2068D	T	901	Transformer	HTT0005
IC	104	IC	NJM2068D	TH	901	Thermistor	CCX1013
IC	451	IC	NJM2068D	TH	902	Thermistor	CCX1013
IC	452	IC	NJM2068D				
IC	651	IC	PA2027A	TH	903	Thermistor	CCX1035
IC	851	IC	NJM2068D	S	101	Switch(LPF/HPF)	CSH1029
IC	852	IC	NJM2068D	VR	101	Variable Resistor 20kΩ(E)	CCS1266
IC	853	IC	NJM2068D	VR	451	Volume 20kΩ(C)	HCS0001
				VR	453	Variable Resistor 10kΩ(A)	CCS1265
IC	901	IC	UPC494C				
Q	203	Transistor	DTA124ES	VR	551	Semi-fixed 10kΩ(B)	CCP1319
Q	204	Transistor	2SC2458	VR	552	Semi-fixed 10kΩ(B)	CCP1319
Q	205	Transistor	2SC2458	FU	901	Fuse 30A	HEK0030
Q	551	Transistor	2SA1928				
	RESISTORS						
Q	552	Transistor	2SA1928	R	101		RS1/10S103J
Q	555	Transistor	2SC1845	R	102		RS1/10S103J
Q	556	Transistor	2SC1845	R	103		RS1/10S103J
Q	557	Transistor	2SA992	R	104		RS1/10S103J
Q	558	Transistor	2SA992	R	105		RS1/10S103J
Q	559	Transistor	2SC1845				
Q	560	Transistor	2SC1845	R	106		RS1/10S103J
Q	565	FET	94-4980	R	107		RS1/10S472J
Q	566	FET	94-4980	R	108		RS1/10S472J
Q	567	FET	94-4981	R	109		RS1/10S562J
				R	110		RS1/10S562J
Q	568	FET	94-4981				
Q	571	Transistor	2SD1768S	R	111		RS1/10S103J
Q	572	Transistor	2SD1768S	R	112		RS1/10S103J
Q	573	Transistor	2SC1845	R	113		RS1/10S123J
Q	574	Transistor	2SC1845	R	114		RS1/10S123J
				R	115		RS1/10S103J
Q	653	Transistor	2SA1048				
Q	654	Transistor	2SC2458	R	116		RS1/10S103J
Q	655	Transistor	2SC2458	R	119		RS1/10S123J
Q	657	Transistor	2SA1048	R	120		RS1/10S123J
Q	658	Transistor	2SC2458	R	203		RD1/4PU222J
				R	204		RD1/4PU222J
Q	659	Transistor	2SA1048				
Q	660	Transistor	2SB1243	R	451		RS1/10S392J
Q	661	Transistor	2SC2458	R	452		RS1/10S392J
Q	902	Transistor	2SA1048	R	455		RS1/10S182J
Q	903	Transistor	2SB1277	R	456		RS1/10S182J
				R	459		RS1/10S333J
Q	904	Transistor	2SB1277				
Q	905	FET	IRFIZ44N	R	460		RS1/10S333J
Q	906	FET	IRFIZ44N	R	461		RS1/10S221J
Q	907	Transistor	2SD2395	R	462		RS1/10S221J
Q	908	Transistor	2SB1566	R	465		RD1/4PU101J
				R	466		RD1/4PU101J
Q	909	Transistor	2SD1919				
Q	910	Transistor	2SD1919	R	467		RS1/10S222J
Q	911	FET	IRFIZ44N	R	468		RS1/10S222J
Q	912	FET	IRFIZ44N	R	469		RS1/10S473J
D	501	Diode	HZS5(C3)	R	470		RS1/10S473J
				R	501		RD1/4PU102J
D	502	Diode	HZS5(C3)				
D	551	Diode	1SS133	R	502		RD1/4PU102J
D	552	Diode	1SS133	R	503		RD1/4PU392J
D	557	Diode	1SS133	R	504		RD1/4PU392J
D	558	Diode	1SS133	R	505		RD1/4PU103J
				R	506		RD1/4PU103J
D	601	LED	SML210LT(LMN)				
D	653	Diode	1SS133	R	507		RD1/4PU105J
D	654	Diode	HZS7L(B2)	R	508		RD1/4PU105J
D	658	Diode	1SS133	R	551		RD1/4PU473J
D	659	Diode	1SS133	R	552		RD1/4PU473J
				R	553		RD1/4PU683J

=====Circuit Symbol and No.====Part Name		Part No.	=====Circuit Symbol and No.====Part Name		Part No.
---	---	-----	---	-----	-----
R 554		RD1/4PU683J	R 856	(RN1/10SE1002D)	GGC1320
R 555		RD1/4PU512J	R 857	(RN1/10SE1002D)	GGC1320
R 556		RD1/4PU512J	R 858	(RN1/10SE1002D)	GGC1320
R 557		RD1/4PU512J	R 859	(RN1/10SE1002D)	GGC1320
R 558		RD1/4PU512J	R 860	(RN1/10SE1002D)	GGC1320
R 559		RD1/4PU271J	R 861	(RN1/10SE1002D)	GGC1320
R 560		RD1/4PU271J	R 862	(RN1/10SE1002D)	GGC1320
R 561		RD1/4PU153J	R 865		RS1/10S821J
R 562		RD1/4PU153J	R 866		RS1/10S821J
R 563		RD1/4PU101J	R 867		RS1/10S223J
R 564		RD1/4PU101J	R 868		RS1/10S223J
R 565		RD1/4PU123J	R 869		RS1/10S472J
R 566		RD1/4PU123J	R 870		RS1/10S472J
R 567		RD1/4PU680J	R 871		RS1/10S472J
R 568		RD1/4PU680J	R 872		RS1/10S222J
R 569		RD1/4PU101J	R 902		RS1/2PMF220J
R 570		RD1/4PU101J	R 907		RS1/10S473J
R 575		RS1/10S101J	R 909		RS1/2PMF220J
R 576		RS1/10S101J	R 910		RS1/10S153J
R 577		RS1/10S101J	R 911		RS1/10S102J
R 578		RS1/10S101J	R 912		RD1/4PU272J
R 591		SPR30R1J	R 913		RS1/10S472J
R 592		SPR30R1J	R 914		RS1/10S472J
R 593		SPR30R1J	R 915		RS1/10S472J
R 594		SPR30R1J	R 916		RD1/4PU332J
R 595		RD1/4PU563J	R 917		RD1/4PU332J
R 596		RD1/4PU563J	R 918		RS1/2PMF220J
R 597		RD1/4PU564J	R 919		RS1/2PMF220J
R 598		RD1/4PU564J	R 920		RD1/4PU472J
R 599		RD1/4PU473J	R 921		RD1/4PU472J
R 600		RD1/4PU473J	R 922		RD1/4PU472J
R 601		RS1/2PMF100J	R 923		RD1/4PU472J
R 602		RS1/2PMF100J	R 924		RD1/4PU470J
R 605		RD1/4PU331J	R 925		RD1/4PU470J
R 606		RD1/4PU331J	R 928		RD1/4PU470J
R 657		RD1/4PU104J	R 929		RD1/4PU470J
R 658		RD1/4PU472J	R 932		RD1/4PU104J
R 659		RD1/4PU103J	R 935		RS1/10S392J
R 660		RD1/4PU102J	R 936		RS1/10S223J
R 661		RD1/4PU472J	R 937		RS1/10S103J
R 662		RD1/4PU221J	R 938		RD1/4PU272J
R 663		RD1/4PU563J	R 939		RD1/4PU272J
R 664		RD1/4PU473J	R 947		RS1/2PMF560J
R 665		RD1/4PU103J	R 948		RS1/2PMF560J
R 666		RD1/4PU103J	R 949		RD1/4PU153J
R 667		RD1/4PU222J	R 950		RS1/10S101J
R 668		RD1/4PU472J	R 951		RD1/4PU563J
R 669		RD1/4PU222J		CAPACITORS	
R 671		RD1/4PU221J			
R 672		RD1/4PU152J			
R 676		RD1/4PU222J	C 101		CCSQCH470J50
R 678		RD1/4PU472J	C 102		CCSQCH470J50
R 679		RD1/4PU101J	C 103		CFTNA104J50
R 680		RS1/10S472J	C 104		CFTNA104J50
R 681		RD1/4PU361J	C 105		CFTNA104J50
R 682		RD1/4PU361J	C 106		CFTNA104J50
R 683		RD1/4PU103J	C 451		CFTNA273J50
R 684		RD1/4PU223J	C 452		CFTNA273J50
R 685		RD1/4PU223J	C 453		CEAS4R7M35
R 686		RD1/4PU223J	C 454		CEAS4R7M35
R 851		RS1/10S471J	C 455		CFTLA224J50
R 852		RS1/10S471J	C 456		CFTLA224J50
R 853		RS1/10S223J	C 457		CFTLA473J50
R 854		RS1/10S223J	C 458		CFTLA473J50
R 855	(RN1/10SE1002D)	GGC1320	C 459		CEAS470M16

====Circuit Symbol and No.==Part Name		Part No.	====Circuit Symbol and No.==Part Name		Part No.
C 460		CEAS470M16	C 851		CKSQYB471K50
C 501		CEAS1R0M50	C 852		CKSQYB471K50
C 502		CEAS1R0M50	C 853		CEAS100M16
C 551		CEAS100M16	C 854		CEAS100M16
C 552		CEAS100M16	C 855		CQMA472J50
C 553		CKPUYB221K50	C 856		CQMA472J50
C 554		CKPUYB221K50	C 857		CCSQCH470J50
C 555		CEAS101M16	C 858		CCSQCH470J50
C 556		CEAS101M16	C 859		CCSQCH470J50
C 557		CFTLA103J50	C 860		CCSQCH470J50
C 558		CFTLA103J50	C 861		CKSQYB471K50
C 559		CCPUCIH150J50	C 862		CKSQYB471K50
C 560		CCPUCIH150J50	C 863		CEAS4R7M35
C 561		337RZM050M1020	C 864		CEAS4R7M35
C 562		337RZM050M1020	C 865		CCSQCH470J50
C 563		337RZM050M1020	C 901	3300μF/16V	CCH1211
C 564		337RZM050M1020	C 902		CEAS221M10
C 565		CMA330J2H	C 903		CEAS2R2M50
C 566		CMA330J2H	C 904		CEAS101M16
C 567		CFTNA333J50	C 905		CQMA472J50
C 568		CFTNA333J50	C 906		CQMA472J50
C 569		CQMA102J50	C 907	3300μF/16V	CCH1211
C 570		CQMA102J50	C 908		478LBA035M2BD
C 651	220μF/10V	CCH1036	C 909		478LBA035M2BD
C 652		CFTLA103J50	C 912		CEAS470M16
C 653		CEAS100M16	C 913		CEAS470M16
C 654		CEAS100M16	C 914		CQMA102J50
C 655		CFTLA103J50	C 915		CQMA102J50
C 656	470μF/16V	CCH1183	C 920		CFTLA564J50
C 657	470μF/16V	CCH1183	C 927		CQMA102J50
C 658		CEAS220M16	C 932		CEAS470M10
C 659	470μF/16V	CCH1183			
C 660		CFTLA105J50			
C 661		CFTLA103J50			
C 662		CFTLA103J50			

6. ADJUSTMENT

IDLE CURRENT ADJUSTMENT

Conditions: Terminate inputs with 1kΩ resistors. No load connected to output. 14.4V DC power ON for 30 seconds then adjust.

• PRS-X720/X1R/UC

Turn power on. Measure the voltage across resistor R586. After 30 seconds from turn on of amplifier, adjust VR552 so voltage is $4.5\text{mV} \pm 0.5\text{mV}$.

Repeat this step with R585 and VR551.

• PRS-X320/X1R/UC

Turn power on. Measure the voltage across resistor R588. After 30 seconds from turn on of amplifier, adjust VR552 so voltage is $4.5\text{mV} \pm 0.5\text{mV}$.

Repeat this step with R587 and VR551.

• PRS-X220/X1R/UC

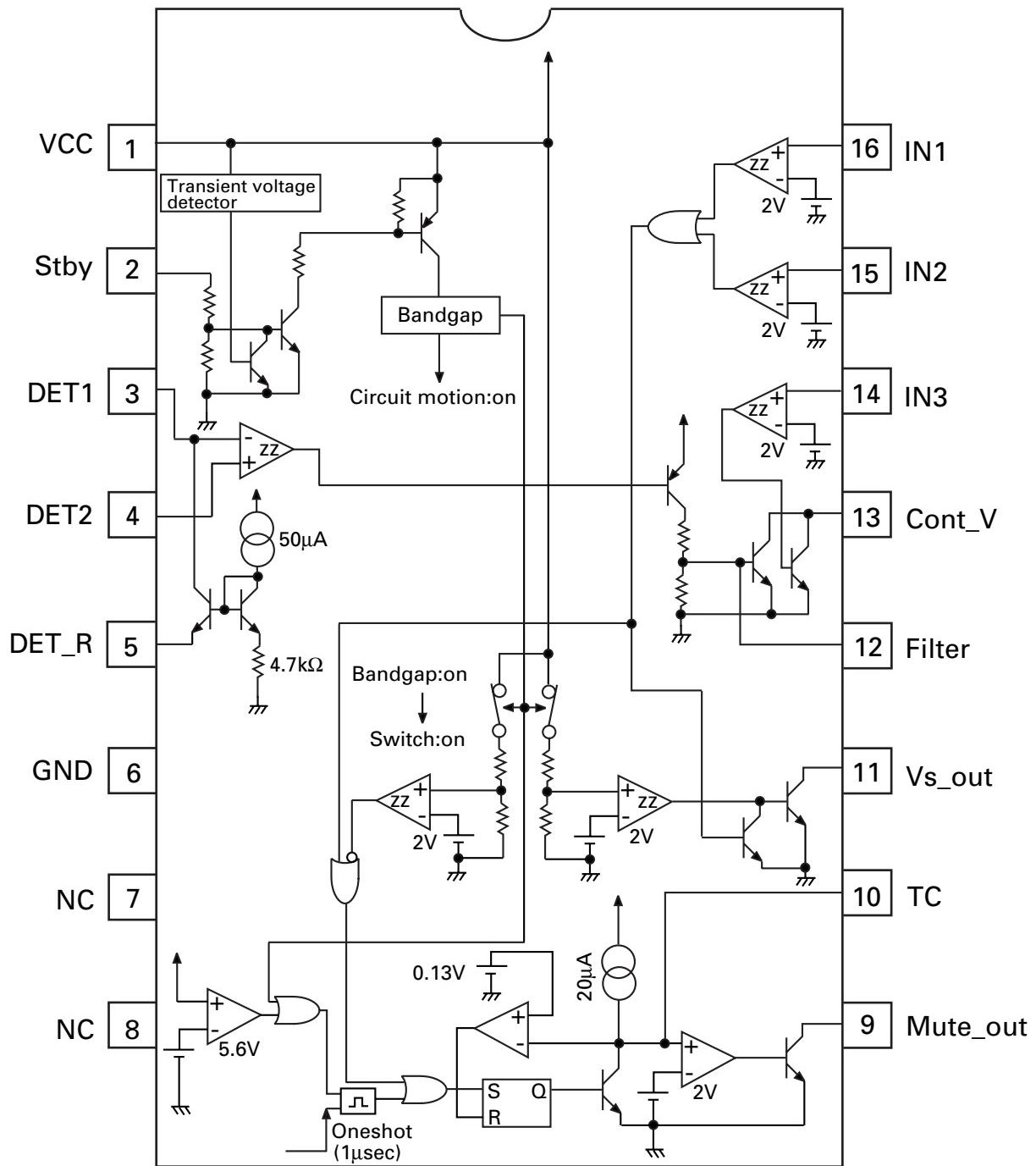
Turn power on. Measure the voltage across resistor R594. After 30 seconds from turn on of amplifier, adjust VR552 so voltage is $4.5\text{mV} \pm 0.5\text{mV}$.

Repeat this step with R593 and VR551.

7. GENERAL INFORMATION

7.1 IC

PA2027A



7.2 DISASSEMBLY

● Removing the two Cases(Fig.1)

- 1 Remove the two screws.
Remove the two brackets.
- 2 Remove the eight screws.
- 3 Remove the four screws.
- 4 (PRS-X720/X1R/UC)Remove the six screws.
(PRS-X320/X1R/UC)Remove the four screws.
(PRS-X220/X1R/UC)Remove the two screws.
Remove the two Cases.

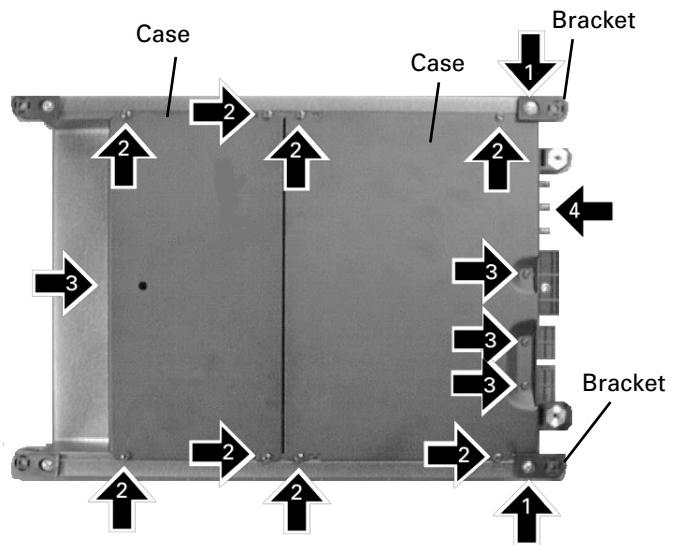


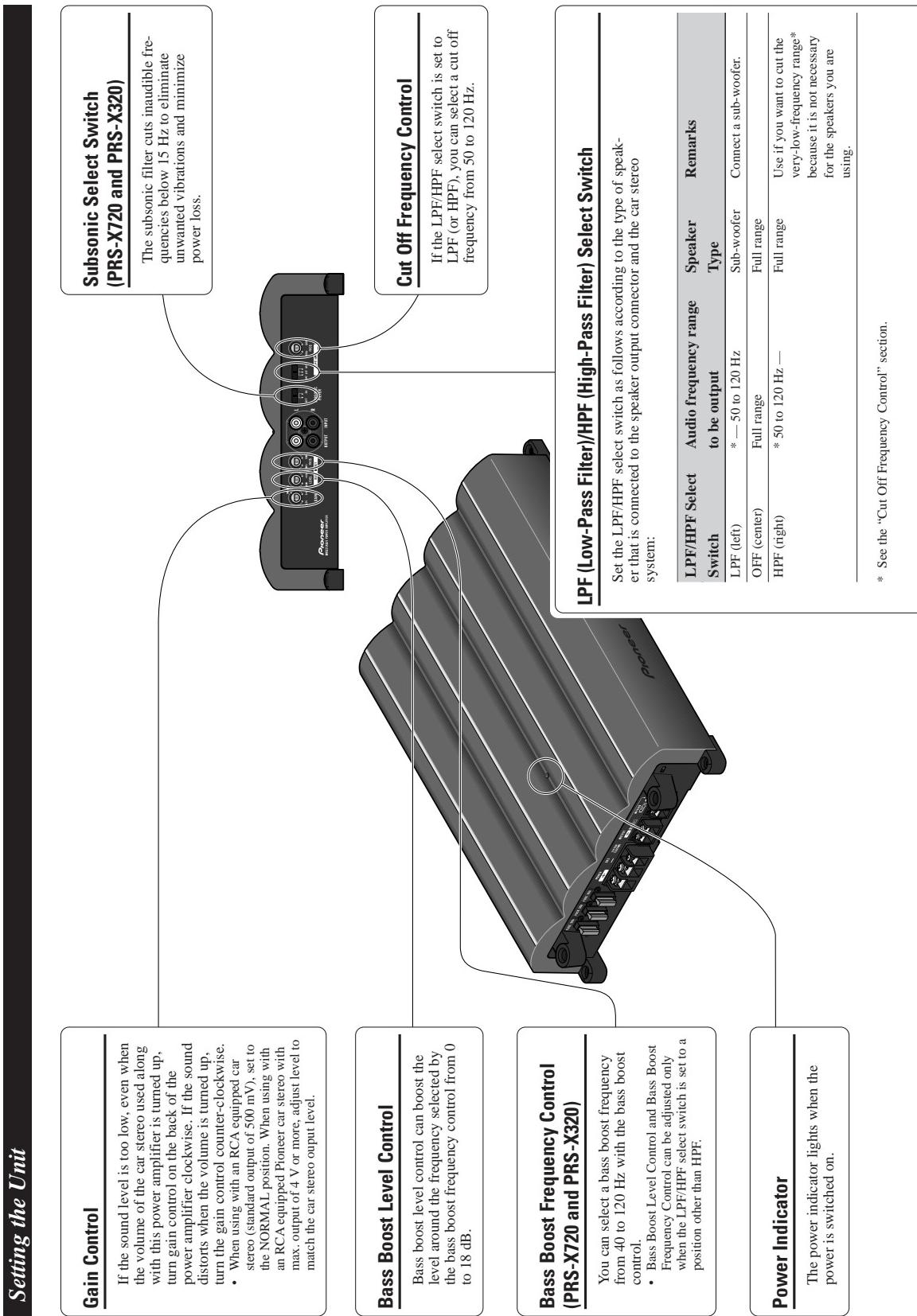
Fig.1

● Removing the Amp Unit(not shown)

- (PRS-X720/X1R/UC)Remove the eleven screws.
- (PRS-X320/X1R/UC)Remove the seven screws.
- (PRS-X220/X1R/UC)Remove the six screws.
- Remove the Amp Unit.

8. OPERATIONS AND SPECIFICATIONS

8.1 OPERATIONS

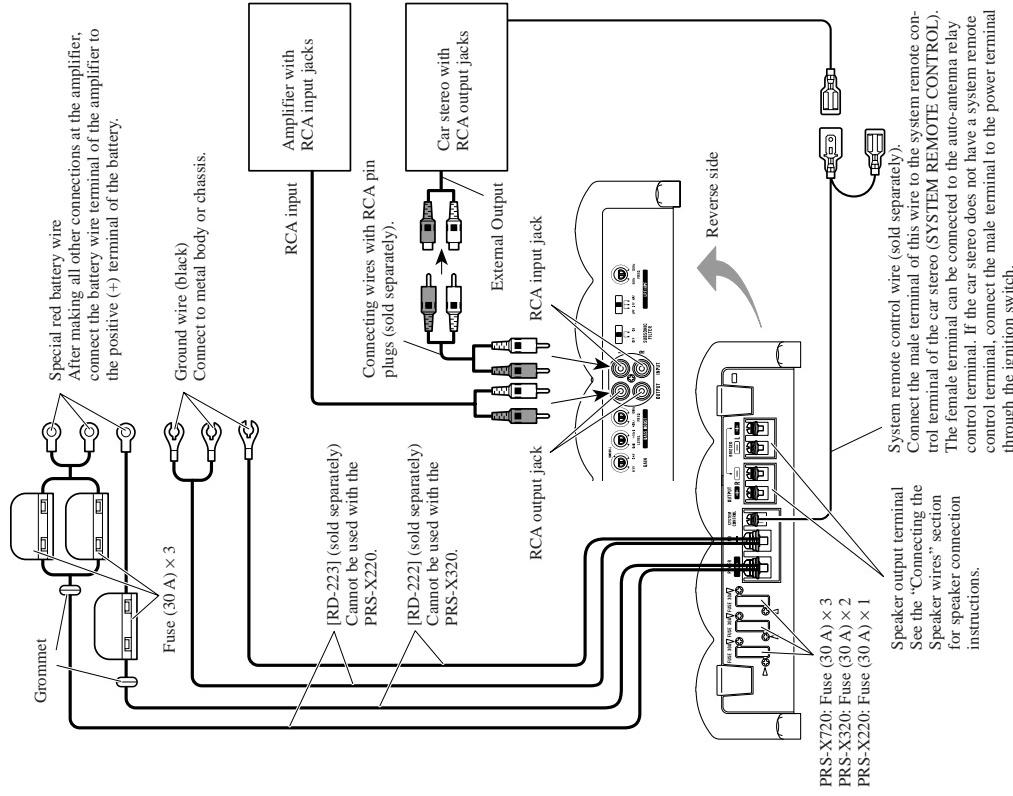


Connecting the Unit

To prevent damage

- Do not ground the speaker wire directly or connect a negative (-) lead wire for several speakers. This unit is for vehicles with a 12-volt battery and negative grounding. Before installing it in a recreational vehicle, truck, or bus, check the battery voltage.
- If the car stereo is kept on for a long time while the engine is at rest or idling, the battery may go dead. Turn the car stereo off when the engine is at rest or idling.
- If the system remote control wire of the amplifier is connected to the power terminal through the ignition switch (12 V DC), the amplifier will always be on when the ignition is on — regardless of whether the car stereo is on or off. Because of this, the battery could go dead if the engine is at rest or idle.

Connection Diagram



8.2 SPECIFICATIONS

Specifications

Power source	14.4 V DC (0.8 — 15.1 V allowable)	Load impedance	$4\ \Omega$ (1 — $8\ \Omega$ allowable)
Grounding system	Negative type	Bridge connection: 2 — $8\ \Omega$ allowable	
Current consumption (PRS-X720)	46 A at continuous power, $4\ \Omega$	Frequency response (PRS-X720)	10 — 50,000 Hz (+0 dB, -1 dB)
(PRS-X320)	32.5 A at continuous power, $4\ \Omega$	(PRS-X320)	10 — 50,000 Hz (+0 dB, -1 dB)
(PRS-X220)	19.2 A at continuous power, $4\ \Omega$	(PRS-X220)	10 — 50,000 Hz (+0 dB, -1 dB)
Average current drawn* (PRS-X720)	15 A ($4\ \Omega$ for two channels)	Signal-to-noise ratio (PRS-X720)	105 dB (HF-A network)
	28 A ($4\ \Omega$ for one channel)	(PRS-X320)	100 dB (HF-A network)
(PRS-X320)	11 A ($4\ \Omega$ for two channels)	(PRS-X220)	100 dB (HF-A network)
(PRS-X220)	20 A ($4\ \Omega$ for one channel)	Distortion (PRS-X720)	0.01% (10 W, 1 kHz)
Fuse (PRS-X720)	6.5 A ($4\ \Omega$ for two channels)	(PRS-X320)	0.01% (10 W, 1 kHz)
(PRS-X320)	10 A ($4\ \Omega$ for one channel)	(PRS-X220)	0.01% (10 W, 1 kHz)
Dimensions (PRS-X720)	30 A \times 3	Separation (PRS-X720)	70 dB (1 kHz)
(PRS-X220)	30 A \times 2	(PRS-X320)	70 dB (1 kHz)
	30 A \times 1	(PRS-X220)	60 dB (1 kHz)
Weight (PRS-X720)	264 (W) \times 65 (H) \times 345 (D) mm	Cut off frequency: 50 — 120 Hz	
(PRS-X320)	[10-3.8 (W) \times 21.2 (H) \times 13-5.8 (D) in]	Cut off slope: -12 dB/oct	
(PRS-X220)	264 (W) \times 65 (H) \times 290 (D) mm	Cut off frequency: 50 — 120 Hz	
	[10-3.8 (W) \times 21.2 (H) \times 11-3.8 (D) in]	Cut off slope: -12 dB/oct	
Weight (PRS-X220)	264 (W) \times 65 (H) \times 240 (D) mm	Cut off frequency: 50 — 120 Hz	
	[10-3.8 (W) \times 2-12 (H) \times 9-1/2 (D) in]	Cut off slope: -12 dB/oct	
Weight (PRS-X720)	6.5 kg (14.3 lbs) (Leads for wiring not included)	Frequency: 40 — 120 Hz	
(PRS-X320)	5.5 kg (12.2 lbs) (Leads for wiring not included)	Gain: 0 — 18 dB	
(PRS-X220)	4.5 kg (9.9 lbs) (Leads for wiring not included)	Frequency: 40 — 120 Hz	
Continuous power output (PRS-X720)	100 W \times 2 (at $14.4\text{ V}, 4\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Gain: 0 — 18 dB	
	400 W \times 1 (at $14.4\text{ V}, 4\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Frequency: 40 — 120 Hz	
(PRS-X320)	200 W \times 2 (at $14.4\text{ V}, 4\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Gain: 0 — 18 dB	
	50 W \times 2 (at $14.4\text{ V}, 4\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Frequency: 40 — 120 Hz	
(PRS-X220)	200 W \times 1 (at $14.4\text{ V}, 4\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Gain: 0 — 18 dB	
	100 W \times 2 (at $14.4\text{ V}, 4\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Frequency: 40 — 120 Hz	
(PRS-X220)	30 W \times 2 (at $14.4\text{ V}, 4\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Gain: 0 — 18 dB	
	120 W \times 1 (at $14.4\text{ V}, 4\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Frequency: 40 — 120 Hz	
	60 W \times 2 (at $14.4\text{ V}, 2\ \Omega$, 20 — 20,000 Hz, 0.8% THD)	Gain: 0 — 18 dB	
Note:	6.5 V/22 kΩ (0.4 — 6.5 V)		

*Average current drawn

- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.

* Specifications and the design are subject to possible modification without notice due to improvements.